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The Position of the Maori
in New Zealand

by

Louis Kelly

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Historical Background

New Zealand likes to think of itself as a biracial society without the problems that afflict most similar societies in the rest of the world. To a certain extent this is true.

Out of a total population of 2,500,000 there are about 400,000 with some Maori blood, the rest of the population being of predominantly British stock. In 1964 there were 184,684 Maoris of more than half-blood, and 35,449 who put themselves down as half-caste. At present the Maoris are concentrated in the North Island. North Auckland, The East Coast (i.e. from Gisborne north) and the King Country (see Map II) are predominantly Maori Areas with sizeable populations in Taranaki, Hawkes Bay and the Wairarapa. The Maori population is mainly rural, though many migrate to the cities in search of the high wages offered for skilled and unskilled labour.

The Maoris arrived in New Zealand in the 14th Century. Traditionally they are divided into six groups of tribes, descended from the six canoes of the original migration. Five of these landed in the North and one in the South. Contact between the groups was frequent by reason of trade and war over tribal boundaries. By the time the Pakeha (white man) arrived in the early 19th Century, the whole country had been divided up among the tribes, and boundaries marked by natural

features had been agreed on. The memorisation and recognition of these landmarks by every member of the tribe was one of the most important parts of the tribal education.

Contact between Maori and Pakeha began in 1760 with the visits of Captain Cook, who entered into trade relationships to provision his ships. Near the end of the century French explorers had much to do with the Maoris of the South Island. One can discount the visit of Tasman in 1642 whose rough handling by a suspicious tribe discouraged any further attempt at even mapping the country. The first prolonged contacts started in the 1820s with the visits of whalers and sealers to the country. The squadron of the Royal Navy based on Sydney, New South Wales, occasionally called for timber and flax for cordage. As French interest in the country was growing the British appointed a Resident, James Busby, in 1833. Anglican missionaries were already working in the country, quietly spreading British influence as well as the Gospel. French influence suddenly loomed up with the arrival of French Roman Catholic missionaries in 1838. In 1840 the Lieutenant Governor, Captain William Hobson and most of the paramount chiefs of the country signed the Treaty of Waitangi, which has been regarded ever since as the Maori Magna Carta.

In return for the protection of Queen Victoria, the Maoris accepted British citizenship, agreed to sell land to the Crown and were assured of the preservation of their own customs. However, Pakeha misunderstanding of the tribal system of land ownership started trouble as early as 1843. A sale of land by a chief had to be ratified by the tribe; the land speculators who did not know or care happily bought land from chiefs, assigned titles and kept clear of the trouble to follow. These land wars spread very rapidly as settlers arrived, armed with titles legal in London, but doubtful in New Zealand. The situation was partially resolved by Sir George Grey, who investigated the Maori customs on land ownership, impounded all doubtful titles and had them validated by the tribes before giving them back to the Pakehas.

At this stage (1854) it was proposed to set aside about a third of the North Island as a separate Maori state. Pakehas were to have the right of travel through it, but no other rights at all. Repeated misunderstandings over landrights on the fringes of this tract (known as the King Country) and of the actions of surveyors putting through roads and railways in this area led to another war, which soon became a crusade against the Pakeha. In the mountainous centre of the country this lasted until 1871. As a result the idea of a separate

Maori state was abandoned and penal confiscations of land were made by the Crown. Even so 4,000,000 acres out of 60,000,000 were left in Maori hands. With this blow to Maori pride the race declined rapidly, reaching a trough in 1896. Disease, depopulation due to war and changes in living habits were contributing causes. As the Maori became acclimatized to his new conditions the decline halted, and the natural increase is now one of the highest in the world (4.03% as against Pakeha 1.99%).

Spread of Population

Until 1945 a Maori was a rare sight in the cities - less than 10% lived in the cities, all concentrated in those of the North Island. According to the census of 1961 34.4% of the Maori people lived in urban areas and 1 in 3 urban Maoris lived in Auckland. 60.4% of the Pakeha population is urban, with the five cities of Auckland, Wellington, Christchurch, Dunedin and Lower Hutt accounting for 42.8%. All but a remnant of 3,000 Maoris who are almost entirely detribalised, live in the North Island. Indeed in Dunedin one has the same attitude to the Maori as Vancouver has to the French.

Social Status of the Maori

In point of law the Maori has the same duties and privileges as the Pakeha, and there is little friction between the two races. However there are some strains. Even after three generations of contact with the Pakeha the Maori finds adjustment to white society difficult, this in spite of a deliberate policy of assimilation that was modified only recently. The most obvious index of this is the high crime rate of the Maori: in 1963, 17.9% of the adult Maori population appeared in court as against 5% of the total population. Most convictions are for crimes against property. The traditional attitude to crimes against the person is more severe in Maori society than in Pakeha and still carries over. For this reason, allied with the more intangible attitudes of intolerance, there is some race prejudice. The situation is not improved by the slightly lower economic status of the Maori, nor by the Pakeha misunderstanding of certain requirements of tribal traditions regarding hospitality and support of those unable to support themselves. Occasionally the country's attitude of "holier than the U.S." is shocked by blatant discrimination. People still tell the story of how Dr. H.R. Bennet and his wife were refused service in a Wellington Hotel because they were Maoris. At the time (1959) Dr. Bennet was returning from a tour of duty as High Commissioner to Malaya.

There is no bar to the Maori's entry into any stratum of Pakeha life. But proportionally, there are only a third as many Maoris in the skilled trades and professions as one would expect. Only about half as many Maoris as should (judged on Pakeha figures) reach the end of the high school course. This could be due to language difficulties, but economic difficulties have much to do with it as well. One cannot discount the Maori reluctance to become fully integrated into Pakeha society, even if he has almost lost his language. Those Maoris who have done well in white society, have usually retained their maoritanga rather than abandoned it. The two outstanding examples of this are Sir Apirana Ngata, who rose to Cabinet rank in the 1920s, and Sir Peter Buck (Te Rangi Hiroa), the head of the Bishop Museum in Honolulu until a few years ago. It is a peculiar feature of the New Zealand situation that it is the Maori who is segregationist and the Pakeha who is eager to integrate.

The Maori Language

Maori belongs to the Polynesian group of languages -- a very homogeneous group which falls within a triangle bounded by New Zealand in the south, Hawaii in the north and Easter Island in the east. A fair degree of intercomprehension is possible over the whole triangle, given some local vocabulary and the manipulation of certain important consonant shifts

between areas: e.g. Maori aroha / Hawaiian aloha / Samoan alosa (love). In New Zealand itself there is a definite division into Eastern and Western Maori, the boundary passing through Rotorua and following the Urewera and Rimutaka Mountains. The dialect taught as Maori is Ngapuhi, the dialect of the northern peninsula: this was the first tribe encountered by the Pakeha and, except for a very stormy beginning, has consistently kept on good terms with the Pakeha. However, tribal loyalties are holding up the levelling of the dialects one might expect from the virtual monopoly of Ngapuhi. There is a fair degree of anglicization of the language, both by borrowing of lexical items, and by the change of certain grammatical relationships within the language.

Juridical Status

The New Zealand parliament consists of one House, the House of Representatives. There are 80 members, of whom 4 are elected by the Maori vote. A Maori of less than half-blood may choose whether he will vote in one of the 4 Maori electorates or not. Plural voting is, of course, prohibited. The electorates follow tribal boundaries as far as possible, thus avoiding putting the Maori in the invidious position of voting for a traditional enemy. In Parliament Maori may be used by both members and petitioners provided an English translation is available.

Laws and decisions of Parliament affecting Maoris are handed down in Maori.

Though not essential the departments of the Public Service dealing with Maoris like to employ bilingual personnel: those employed in Maori areas are usually Maori themselves. The deliberations of the Maori Land Court change language continually, for many of their cases are based on tribal land disputes. The Maori has a habit of breaking into a tribal chant to prove that he has tradition on his side.

In the Civil Service in general Maori is not a common language. In the South Island it is hardly necessary, and even in the north most Maoris can express themselves in English to the officials if they have to.

There are no separate Maori Criminal or Civil Courts, though a Maori may demand an interpreter if he is involved in a case. As the tribe (in country areas) is largely involved with each one of its members, the probation service in several areas is bilingual.

The Armed Forces are officially unilingual, but there are a large number of Maoris in the Regular Army at present, most of them NCOs. During the Second World War, over the protests of many regular soldiers, a separate Maori

unit was formed, with about half of the officer strength Pakehas. There is still a place for it in Army estimates in the event of hostilities, apparently. Recruiting was done on a tribal basis, the companies being formed according to the geographical spread of the original canoes. It was found that army discipline had to be modified to fit the Maori way of doing things. Most clashes were over responsibility for equipment. There was nothing in the Maori code preventing a man from lending his rifle to one who had mislaid his, for instance. Most Maoris believed that if the right number of men turned up at a defaulter's parade honour was satisfied, even if they were not the right ones. Maori proved to be the language of the Battalion among themselves, though English was used elsewhere. German coding experts apparently never had much success with monitoring Maori broadcasts.

Education

In law Maoris have a choice of schooling but there are only 150 Maori primary schools in the country with 11 secondary schools. To this one should add 5 or 6 private schools -- mainly church-run. In all 21.7% of the Maori school population (about 14,000) goes to a Maori school.

In general the language of instruction is English with Maori a compulsory subject, and Maori Arts, Crafts and traditions form an important part of the curriculum. Some schools, notably the private schools, are experimenting with the restricted use of Maori as a language of instruction. This is against both tradition and regulations however. Following the nineteenth-century policy of complete assimilation, teachers at Maori schools used to forbid the use of Maori at school, even in the school playground.

In all schools Maori may be taken as one of the 5 or 6 options for School Certificate (taken at the age of 15). It can also be taken to University Entrance. The traditional text is Williams, First Steps in Maori, written by the first Anglican Bishop of the North of New Zealand and re-edited since by his descendants. It has been challenged by various other grammars written in the last fifty years, but has survived triumphantly. However the Maori Education Foundation has published a new series of texts Te Rangatahi (The New Net) with a language lab course to go with it. Its adoption depends on the training of Maori teachers in audio-visual techniques.

Only two of the country's six universities, Auckland and Wellington, offer courses in Maori. In both Universities Auckland appoints the examiners. The courses are under the Anthropology Departments and are taught by both Maori and Pakeha staff. Elementary Maori is a compulsory part of First-year Anthropology for those who do not speak it. To complete a degree in Anthropology one unit (i.e. a year's study) of Maori is a prerequisite. Two units of Maori are offered to both Maori and Pakeha students. It is therefore not possible to complete a B.A. in Maori (this is a three-year degree) though at the M.A. and Ph.D levels one can do a thesis in Maori for the Anthropology Department. The courses cover both language and lore. Maori Adult Education courses are also offered by the Universities. Unfortunately exact figures of attendance are not available.

In the ordinary primary school system Maori legends are taught as part of the Social Studies syllabus. No fluency in Maori is required and the pronunciation of the language, though easy, is not carefully taught. The fate of Maori place-names in Pakeha speech is enough to nullify any attempts at correctness or pedantry on the part of the teacher.

As an attempt to encourage more Maoris to complete secondary school the Maori Education Foundation was set up in 1961 to provide bursaries for Maori pupils of special promise to continue beyond the primary school. These bursaries can also provide for four years' University study. Grants are also being made under the Foundation to the families of these students to help improve economic conditions which are often cited as putting difficulties in the way of the eager student. As most Maoris go to country schools, some effort is being made to make country service more attractive to the good teacher to keep him in the country after the completion of his required three years "Country Service". The difficulties in educating the Maori are probably linguistic. Most speak English with a marked accent, in spite of being pretty fluent.

New Zealand's Island Territories present a slightly different picture. There are about 19,000 Cook Islanders who speak a dialect closely related to Maori. The Cook Islands use the New Zealand syllabus altered to fit local conditions, and most able pupils are sent to New Zealand for their education after primary school. The language of instruction for the first two years is the vernacular with the gradual introduction of English in the following years. By the end of primary school English is the normal language of instruction. The same system is in use in Niue and Tokelau which are juridically part of New Zealand.

Maori Mass-Media are practically non-existent. The many Maori newspapers of the first 80 years of New Zealand's history have all disappeared except for small tribal weeklies turned out on a Gestetner machine. The Maori religious groups turn out a few weeklies: Te Whetu Marama o te Kotahitanga, by the Ratana Church, for instance. There are a few broadcasts in Maori on the NZBC, in all about 30 minutes a week of scheduled time. Documentary programmes with a large slice of Maori dialogue are becoming more common. From time to time the National Film Unit does a film with some Maori dialogue. This is mainly done for local colour.

Tribalism

The urbanization of much of the Maori population has created problems of adjustment, some beyond the capabilities of the Maori. As a general rule the Pakeha institutions have been accepted only to complement the old Maori way of living in a closely knit tribe made up of kinship groups (nga hapu). Reference has already been made to the power of the Tribal Councils, which are still mainly drawn from the noble families and which tend to act as a buffer between the Pakeha and his rather absurd ways and the Maori who tends to have a good-humoured tolerance of the minor lunacies of his fellow-citizens.

The Maori in the impersonal urban milieu is in an unenviable position. If he belongs to a local tribal remnant or to a hapu with affinities with the locals he has no trouble integrating. He is on home territory and the Pakeha is there as his guest. This is especially true of some medium sized cities near the coast where the local tribe owns a large part of the land and the city has to pay a fat ground rent. However if he is a member of another iwi he is not accepted as anything but a transient guest, even if he settles in a permanent sense, until about the third generation. He is accorded the hospitality of the local iwi but is just not invited to take place in the community. In the big cities Auckland and Wellington, a new ngati (tribal group) has been formed from the tribal remnants left with the express intention of absorbing immigrants from the country. It seems to be working. Any social action on the part of the Maori still must be originated at the tribal level by the tribal leaders who will have been briefed from Wellington.

There are Maori representatives in the two major political parties, but in general the Maori tends to vote left. There are about six minor Maori parties, again on a tribal basis. The Maori peak of political activity came at the turn of the century as he began to recover from the decline he had been in since 1840. The Young Maori Party, led by Apirana Ngata,

brought pressure to bear on the whole political structure of the country by some brilliant campaigning among the Maori for the recognition of their rights under the Treaty (and a few not recognized by it). The minor parties are a remnant of this.

Among the political activities of the Maori one must not forget the office of King. This has come to be a prerogative of the Waikato tribes, but the office seems to command respect. It is an outcome of the Maori Wars of last century, in which the Maori decided he would be in a stronger position to fight the Pakeha if he worked from a central point of authority. This was placed in the King Country, as this was still a Maori preserve which happily absorbed (through the digestive tract) any Pakehas who ventured into it. Much of the social reforms that have been carried out in the last 50 years have been pushed through by the King and his organization. The office is elective, but in practice it is the prerogative of one hapu as an ordinary chieftainship is.

Economic Status

In general the Maori per wage-earner is not as well off as the Pakeha. In 1956 the average annual income was £540 sterling, as against £750 for the rest of the country. This

is aggravated by a consistently higher birthrate (a national joke among the white population) and the fact that the family for a Maori includes grandparents, cousins, grandchildren and even adopted children of relatives. Giving a fifth or sixth child to a relative who has only three is very common. The family unit is not as well delimited as in Pakeha society. This means that any Maori has open house for relatives and friends, a source of constant annoyance to neighbours. (Any Maori who forgets this finds that he is boycotted in subtle ways by the tribe until he mends his ways). He tends to take French leave from his employers to attend the family and tribal business: a tangi (funeral and wake) is an affair of a week involving the whole tribe, for instance. This is viewed very dimly, of course, by Pakeha employers in the city; country people are more used to it. But the Maori suffers economically in consequence.

One Maori in four is a tradesman or unskilled labourer - the corresponding Pakeha proportion is 1 in 5. About 60% of the Maori population are farmers - only about 30% of the Pakeha population. Though there are no precise figures available one gets the impression that the Regular Army, at least in the North, is becoming a Maori preserve. There are, in consequence, few Maoris in the professions.

Intermarriage

There is no legal bar to intermarriage, but in certain sections of society, a strong emotional one. Interracial marriages are not very common, occurring mainly in the lower reaches of both societies. Again tribal pride has much to do with limiting intermarriage, even among the Maori tribes themselves.

Religious Structure

In the more orthodox religions the Maori has a small place. There is a Maori Anglican bishop with Maori clergy. Services are in Maori. Among the Roman Catholics there is a handful of Maori priests, but a very active Maori mission run by Maori-speaking Pakeha priests. These are mainly in the country. However, at several city parishes Maoris can be attended to in their own language. There is also a small Maori membership in the non-conformist churches. The Mormons have been very active among the Maori, encouraging Maori art and craft and picking up many who had lapsed from other faiths.

There are several indigenous Maori religions, based on a marriage of Pakeha and Maori beliefs. The chief are Ratana and Ringatu with 30,000 between them. The old Maori paganism is dead, but its customs still survive. For instance, the practice of putting a tract of land under tapu because

of the accidental death of a hunter on it is still used among these people. What is surprising is that Maoris of other religions observe it too.

Culture

There is some activity in the Maori publishing field. Te Ao Hou (The New World) is a bilingual magazine put out by the Maori Affairs Department. The Education Department publishes a Maori edition of the School Journal, which is not a translation of the English edition. The traditional legends and chants are being slowly collected and published, an activity started by Sir George Grey in 1854 and continued by Sir Apirana Ngata and Sir Peter Buck. Apart from this there is small amount of original literature appearing in Maori. Williams' Dictionary has just appeared in a seventh edition (1st in 1872) and there are many English collections of Maori legends on the market.

The culture of the Maori remains mainly oral. Tribal lore is handed on by word of mouth, a risky business considering the attitude of many of the younger generation. It is interesting to observe that very often a Maori adolescent who spends much effort in cutting himself adrift from his culture will become a Maori again in his thirties. There has been a spectacular attempt by the Maori to go to the springs of his culture in the last decade.

Records of Maori legends and chants are very easy to buy, and they are well done. A.W. Reed Ltd., a book publisher of Wellington, is publishing much Maori stuff in both book and record form, even to a gramophone course in Maori.

It is an offence to export from the country pieces of Maori art made before 1840. But modern pieces are not lacking. The Maori Affairs Department has caused a revival of interest in Maori art forms and a new Maori community will have **its** churches, halls and even houses decorated in the traditional style, even if the tools used are modern. As in the old days, the figures have some relationship with tribal history, and are an almanac of the tribe for those who know how to read them. Modern music has almost ousted the old chants that were used to accompany games and dances, though the games and dances have survived and multiplied. Many Pakehas are as expert as the Maori; in fact, for a short time Pakehas were teaching Maori at Maori schools.

Sport

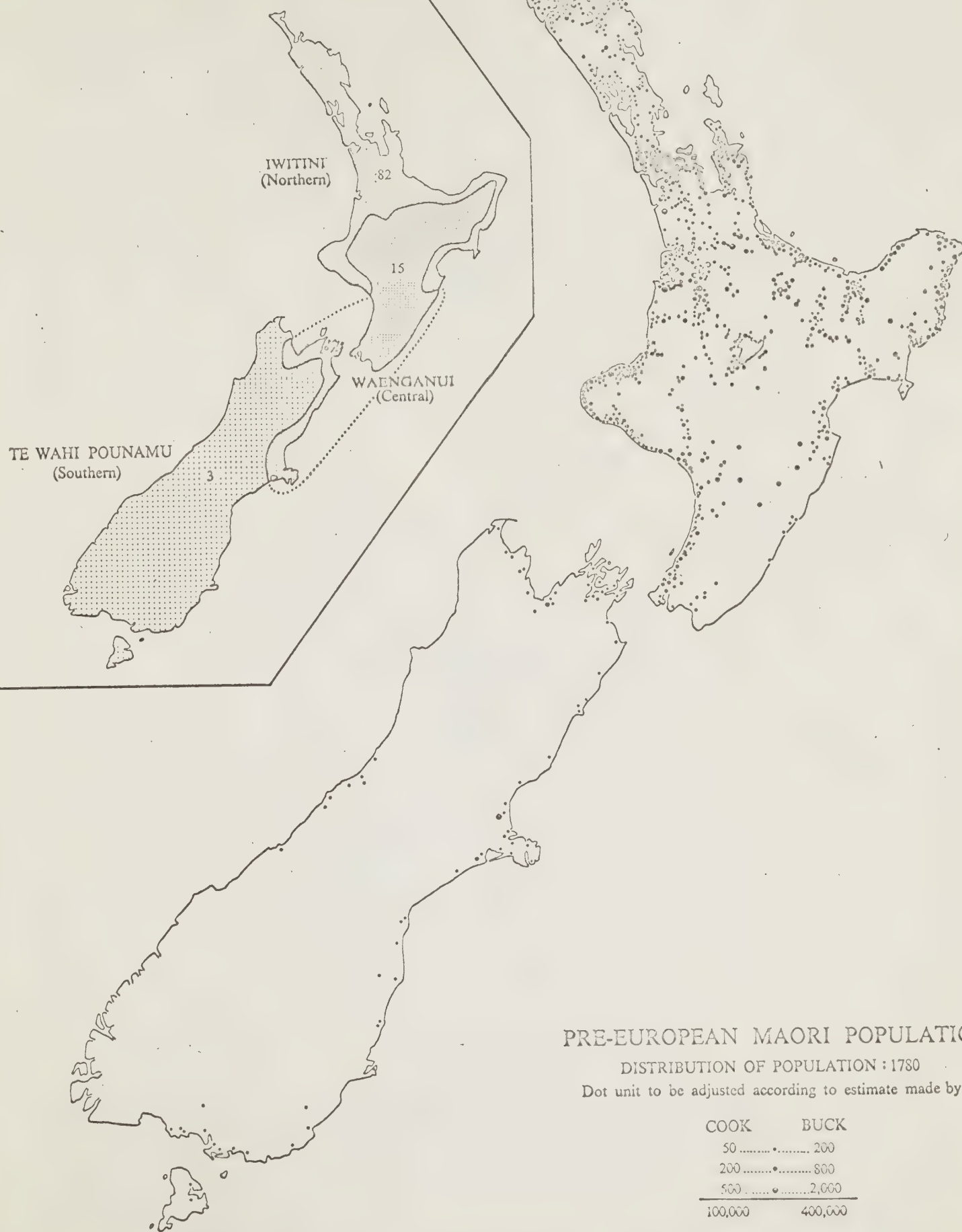
The game par excellence of the Maori is Rugby football. An intertribal fixture is arranged with the same enthusiasm as the tribal wars of old and the feeling can run just as high. A Rugby match will draw tribal members from all over the country for days beforehand and keep them there

for days afterwards. Memories of who ate who after the old battles are still alive enough to put some sting into the proceedings. The match becomes the occasion of feasting and the passing on of tribal lore by the old people, and with the resurgence of maoritanga, by the middle-aged. Old war skills like canoe paddling have been revived as sporting events in the King Country. Before all intertribal events the full war ceremonies including the dance (haka) and reciting of ancestral exploits, are performed and everybody present is expected to understand it, not merely look on it as folklore.

Conclusion

In spite of being almost entirely bilingual, the Maori has managed to combat the integrationist tactics of the Pakeha. This has been due in the past to the rural concentration of the Maori population but the Maori now has a pride of race and achievement making him more conscious that he is not a Pakeha and causing him to resist absorption. This attitude is being aided and abetted in official quarters. Just how long this will last is anybody's guess.

Approximate percentage distribution
of population by regions





Map II

Note. The King Country (page 1) comprises the territory of the Waikato, Ngati-Maniapoto, Te Arawa, Ngati-Tuwharetoa and Te Urewera.

The Wairarapa is shared between the Ngati Awa and the southern hapu of the Ngati Kahungunu.

Disposition of South Island Maori Tribes
at 1840



Map III

The only tribe remaining in any numbers is the Ngati-Toa.



TRIBAL AREAS AND COMPANY BOUNDARIES, 28 (MAORI) BATTALION

Map IV

The Boundaries follow the settlement patterns of the 6 original canoes.

- A Coy - 1 canoe
B Coy - 1 canoe
C Coy - 1 canoe
D Coy - 2 canoes
South Island 1 canoe

Bibliography.

New Zealand Yearbook. Government Printer, 1889 --

Furnishes statistics & census figures.

Beaglehole, E. & Beaglehole, P. Some Modern Maoris. New Zealand Council for Educational Research, 1946.

Looks into the question of the Maori in Rural Society.

Buck, Sir Peter (Te Rangi Hiroa).

Vikings of the Sunrise.

Maori Purposes Fund Board, Wellington 1940.

_____, The Coming of the Maori

Maori Purposes Fund Board, Wellington 1949.

Treat mainly Pacific anthropology.

Metge, Joan. A New Maori Migration. University of London, 1964.

A Study of the Maoris of Auckland City.

Ritchie, J.E. The Making of a Maori. A.H. & A.W. Reed, Wellington, 1963.

A Study of a Maori Rural Community.

Sutherland I.L.G. The Maori Today. Whebcombe & Tombs, 1939.

A Series of essays on the Maori to celebrate the centenary of Pakeha settlement.

FINAL REPORT

Authors: A.J.C. King
C.E. Angi

Title: Language and Secondary
School Success

Div: VI Report no. 26

VOLUME 98

P R E F A C E

This study fulfills the terms of a contract, 9 May, 1966, whereby:

The Ontario Institute for Studies in Education undertakes to carry out a study for the Royal Commission on Bilingualism and Biculturalism on the following subject:

"To determine whether differences in secondary school retention rates among students, divided into three groups on the basis of the language spoken in their homes, can be attributed to differential representation in socio-economic categories related to: 1) Parental Occupation; 2) The Extent of Parents' Education; 3) Number of Children in the Family; 4) Parents' Recommendations for Future Educational Plans; 5) Size of the Municipality in Which the Student is Located; 6) Geographical Location of the School Which the Students Attend"

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Figure 1

LOCATION OF SCHOOLS USED FOR GEOGRAPHICAL
COMPARISONS.7

CHAPTER I

INTRODUCTION

The Carnegie Study of Identification and Utilization of Talent in High School and College employed data collected on the secondary school careers of 90,719 students enrolled in Grade 9 of the public, private and separate schools of Ontario in 1959. In each of the first five years of the study, student and staff questionnaires were administered. A battery of academic aptitude and achievement tests was administered in Grades 9, 10, 11, and 12, and final school marks were reported for each student in each year of his high school attendance. An interest inventory was administered in each of the first four years of the study, and a brief withdrawal form was utilized with reference to the withdrawals.

In the preliminary analysis of these Carnegie materials, it was discovered that retention rates for three groups of students -- (1) those who spoke English in the home (2) those who spoke French in the home and (3) those who spoke some other language in the home -- differed considerably when the groups were compared with one another. The differences were most pronounced when the French language group was compared with the other two. However, the French language group contained disproportionate numbers of students in socio-economic classifications often associated with low school retention rates. The question therefore arose whether it would be possible to account for the retention differences between the French language group and the other two in terms of differential representation

of the French language group in socio-economic classifications which appeared to produce high attrition rates in secondary school.

Since teachers' ratings of students, and students' scores on a number of aptitude and achievement tests were also available, it was decided to look at the relative scores and ratings to determine whether low aptitude, low achievement, or low ratings were associated with differential retention rates. The study was undertaken then with the intent, first, of analyzing the relationship of certain socio-economic factors to secondary school retention rates, and second -- assuming that the retention differences among the three language groups could not be completely explained on these bases -- of looking at the secondary factors of achievement, aptitude and teacher ratings.

PURPOSE OF THE STUDY

The purpose of this study was to determine whether differences in secondary school retention rates among students divided into three groups on the basis of the language spoken in the home could be attributed to differential representation in socio-economic categories related to:

1. father's occupation;
2. size of the municipality in which each student's original school of enrolment was located;
3. extent of parents' education;
4. geographical location of schools in which students were originally enrolled;
5. number of children in the family;
6. parents', teachers', peers', and student's own recommendations for future educational plans.

Differences in terms of scores on achievement and aptitude tests, and teachers' ratings of student characteristics were also analyzed to determine whether they were associated with the differential retention rates.

SUBJECTS OF THE STUDY

Although the Carnegie study traced the careers of 90,719 students, complete information for each of these students was not available for a number of reasons. The most prominent of these reasons was absenteeism at the time an instrument was administered. Item No. 5 on the Grade 9 Student Questionnaire was used to determine the language classification, and 86,155 valid responses were obtained for this item. Table I presents the language breakdown for this total. The 4,564 students who were not included in this phase of the study either were absent at the time of the administration of the questionnaire; had withdrawn from school before the administration of the questionnaire; had responded to more than one alternative on Item No. 5 of the questionnaire; or had omitted this item entirely on the questionnaire. There was not sufficient evidence to make inferences regarding specific characteristics of those students who were not a part of this project for the above reasons. It is probably safe to assume, however, that the small number of withdrawals had dissimilar characteristics from those who were retained for the remainder of the study.

In order to ensure the validity of this retention study, only those students who voluntarily withdrew from school were considered in the investigation. Students who left for the following reasons were not included in the totals: transfer out of province, illness, and death. The number of students included in this study then, was 82,500, or

TABLE 1

SUBJECTS OF THE STUDY

TOTAL CARNEGIE STUDENTS		CARNEGIE STUDENTS INVOLVED IN THIS STUDY ^b					
		T		M		F	
	N	%	N	%	N	%	%
ENGLISH SPOKEN AT HOME ^a	74,849	82.5	71,819	87.0	37,195	87.2	84.7
FRENCH SPOKEN AT HOME ^a	5,129	5.7	4,850	5.9	2,435	5.7	8.4
OTHER LANGUAGE SPOKEN AT HOME ^a	6,177	6.8	5,831	7.1	3,004	7.1	6.9
NO ANSWER ON TAPE	4,564	5.0					
TOTAL STUDENTS ON TAPE	90,719	100.0					
TOTAL STUDENTS ON THIS STUDY			82,500	100.0	42,634	100.0	100.0

^aCategorized on the basis of the responses to Item 5 on Grade 9 Student Questionnaire

^bless students who did not respond or responded incorrectly to item 5 and less withdrawals under the classifications transferred out of the province, death, marriage, and imprisonment

90.9 per cent of the original enrolment. (See Table I for a numerical breakdown of the above information).

DEFINITIONS

Withdrawals. For the purposes of this study, the word "withdrawal" will refer to a student who left school for one of the following reasons: employment, further education, marriage or imprisonment.

Yearly Retention Rates. The phrase "yearly retention rates" refers to the numbers and percentages of students who remained in school classified by year and not by grade. Grade 9 enrolment constitutes a base of 100 per cent.

Grade Retention Rates. The phrase "grade retention rates" refers to the numbers and percentages of students who moved successfully from grade to grade: for example, the number and percentages of students enrolled in Grade 11 in the third year would be based on the Grade 9 enrolment.

Language Groups. The phrases "English language group", "French language group", and "Other language group" refer to the three classifications obtained from the responses to Item No. 5 on the Grade 9 Student Questionnaire: "What is the chief language spoken in your home?" Each of these categories refers to the group of students who indicated either that (1) their parents spoke English in the home (2) their parents spoke French in the home: or that (3) their parents spoke some other language in the home. The above phrases will be used throughout the project, and should not be confused with the concept that the students themselves are necessarily bilingual.

Sources of Data

Student marks, scores on aptitude and achievement tests (the Canadian Academic Aptitude Test, the Canadian English Achievement Test, the Canadian Mathematics Achievement Test, the Canadian Achievement Test in English, the Canadian Achievement Test in French, the Canadian Achievement Test in Mathematics, the Canadian Test of General Information, the Canadian Physics Test, The Canadian Geometry Test, and the Scholastic Aptitude Test), responses to staff and student Questionnaires, and withdrawal information supplied the raw data employed in this particular project.¹

The items in the Grade 9 Student Questionnaire of particular significance in this study were those pertaining to the chief language spoken in the home, year of birth, course enrolment, father's occupation, total number of children in the family, extent of parents' education, and parents' suggestions for future educational and work plans.

A tape file was prepared from the Carnegie Data to include the complete data for the first five years of the study, with the exception of the interest inventories and the Grade 13 marks. The number of students enrolled in the sixth year of the study and the number of students who obtained Honour Graduation Diplomas after five years was also included on the tape.

A geographical breakdown of the schools was introduced for purposes of this study. The assumptions behind this geographical breakdown were based on the contention that educational opportunities vary in terms of economic factors which tend to be localized, and that if a greater

¹See appendix for copies of questionnaires and description of tests.

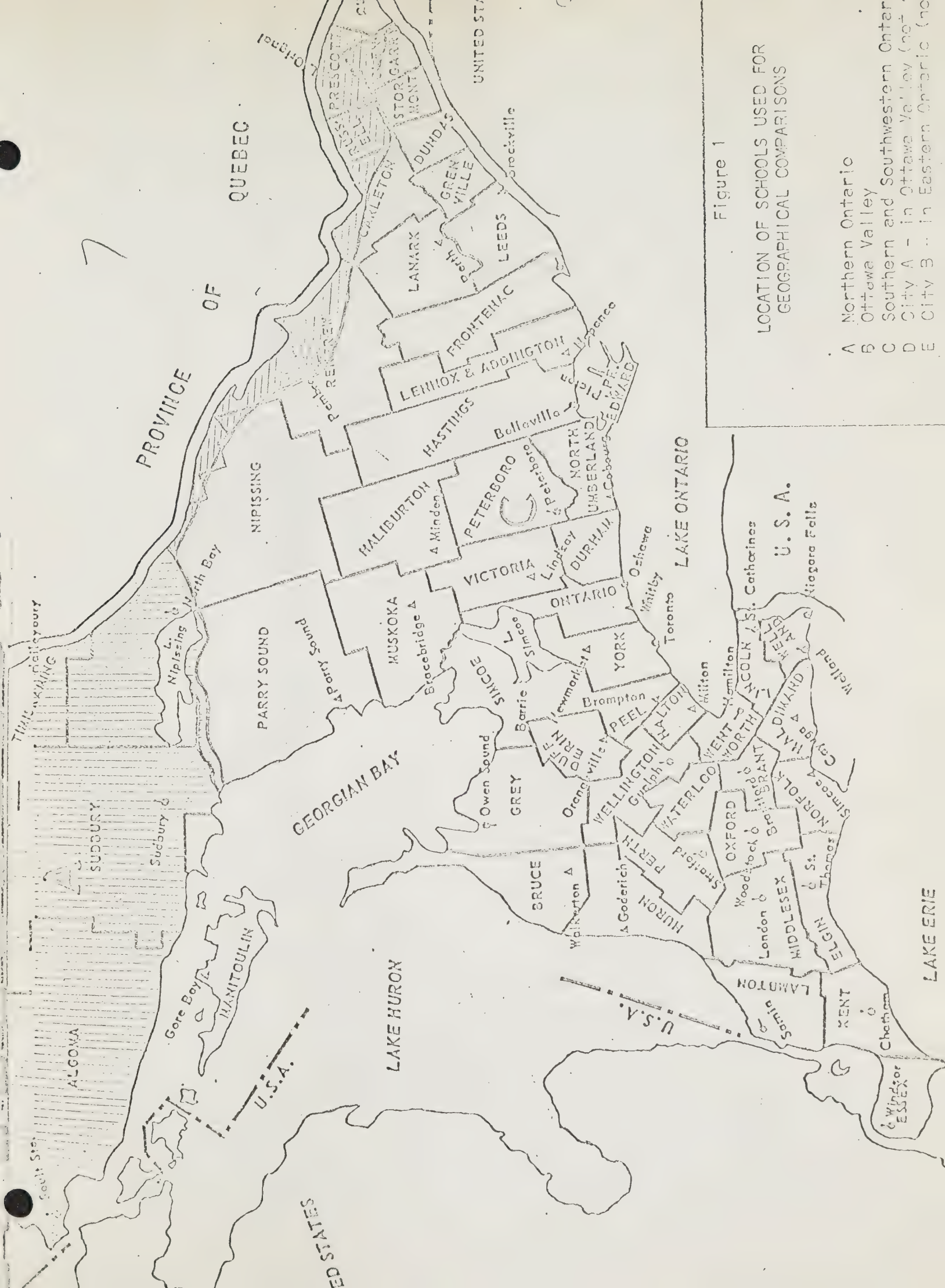


Figure 1

LOCATION OF SCHOOLS USED FOR
GEOGRAPHICAL COMPARISONS

- A Northern Ontario
- B Ottawa Valley
- C Southern and Southwestern Ontario
- D City A - in Ottawa Valley (not shown)
- E City B - in Eastern Ontario (not shown)

concentration of one of the language groups appears in any of these geographical breakdowns, inference regarding retention differences could be made. The schools were divided into the following five geographical units, (see Figure 1):

- (A) Northern Ontario; (B) Ottawa Valley; (C) the remainder of Ontario;
- (D) City A - a large city in the Ottawa Valley, theoretically bilingual;
- (E) City B - a small city in eastern Ontario with a high concentration of French language population.

Preparation of the Carnegie Study Retention Tape

The original data was stored on IBM cards, and they in turn were processed onto twelve computer tapes composing the "Carnegie Human Resources Data Bank". A special single computer tape prepared for the study incorporated those items of information which seemed most pertinent. A summary of the items of information appearing on the tape prepared for this study appears in Appendix D.

Sources of Error

There were a number of opportunities for the occurrence of error during the data collection, clerical operation, and card-to-tape processing. Some of the most important of these are listed below:

1. The seriousness with which both staff and students responded to the staff and student questionnaires can be estimated only in terms of the number of responses that seemed to be totally inappropriate. These inappropriate responses appear to make up less than one per cent of the total number of responses.
2. The clerical handling of millions of punch cards, including the storage and occasional processing, introduced the dangers of card duplication, possible card loss, and accidental card destruction.

3. In a questionnaire, one must expect that some of the questions would appear ambiguous to certain individuals. This would also be true to some extent in the testing programme.
4. The time period of the study covered more than six years, involving staff changes in the schools and in the Department of Educational Research. Communication errors were likely introduced when instructions were passed along, many of them verbally.

Preparation of Special Programmes

Two computer programmes were specifically devised to facilitate comparison of retention rates in each of the three language groups in terms of the socio-economic and achievement variables that were available. The basic programme provides for a year-to-year analysis of the student enrolments, broken down by grade. This programme made possible the computation of:

1. Numbers and percentages of students enrolled in succeeding years, using Grade 9 as a base;
2. numbers and percentages enrolled in each grade by year;
3. total student enrolment remaining in the sixth year; and
4. percentage and number of Honour Graduates after five years in high school.

Most of the tables that appear in the main body of the report were derived from the application of this programme. A small degree of error was introduced when the 86 students who were accelerated in high school were removed from the analysis after Grade 9.

A second programme was prepared to provide mean scores and standard deviations for each of the three language groups on the battery of aptitude

and achievement tests and on school marks. The mean scores and standard deviations were obtained for each of the language groups by year of attendance in order to compare those students who remained in school for each year of the study in terms of their performance on the above measures.

For the purposes of this study, slight revisions were made in programmes that were already available for the determination of multiple-regression equations, correlation coefficients, and for multiple-discriminant analysis.

Statistical Analysis

Although ostensibly the data were in the form of parameters of population values, there did appear to be some advantage in applying statistical analysis. The use of this approach was based on the assumption that although the subjects of this study represented the entire population under investigation, in theory they could be taken to represent a sample of a larger universe on a temporal basis, that is, to be representative of similar population in preceding and succeeding years.

Since the chi-square represents probably the most widely used and understood method of comparing observed results with those expected theoretically, on the basis of some hypothesis, this technique was applied to the data of the study. Thus, for the data presented in the retention tables, the hypothesis being investigated was that "the expected proportion of fifth-year enrollees (or honour graduates) for each language group, based on Grade 9 enrolment is not significantly different from the observed proportion". For the summary tables, the hypothesis was that "expected proportions of Grade 9 enrollees, based on the proportions of the total enrolment assigned to each socio-economic (or other) sub-classification,

is not significantly different from the observed proportions within the three language groups." It can therefore be said that if the empirical data depart from the hypothetical chance models, then the differences among the three language groups could be said to be significant. Since most of the chi-squares that were determined were significant at the .001 level of confidence, the specific hypotheses associated with each computation are not discussed in the text, but are left implicit.

The chi-squares computed from the retention tables essentially involved two degrees of freedom (an estimate of the latitude of variance).² Since this figure was the same for all tables of this type, it was not included in the tables. However, since the number of sub-classifications on the summary tables varied, the degrees of freedom figure was included.

Coefficients of correlation determined by the Product-Moment Method³ were utilized to demonstrate the relationships between the variables, and between these variables and an arbitrarily defined withdrawal factor. For this withdrawal factor, a numerical figure was assigned, depending on the length of time a student remained in school, up to five years. The students who left their respective schools before the first year was completed were assigned the number 1, and those who left after completing the first year, but not enrolling in the second year were assigned the number 2, and so on up to the fifth year, when those students who left at some point during the fifth year were assigned the number 9, and those students who completed the fifth year were assigned

² H. E. Garrett, Statistics in Psychology and Education, (New York: Longmans, Green and Co., 1958), p. 255.

³ ibid., pp. 126-127.

the number 10.

The data for the three language groups were subjected to a multiple discriminant analysis programme for each year of the study.⁴ This analysis provided an estimate of the relative discriminatory power of each variable. Since it was not possible to obtain all the scores for each of the students on each of the variables in this study, it was necessary to produce the missing scores by the use of regression equations. A programme was prepared using multiple regression analysis to produce up to six missing scores for a subject predicted by determining the relationship between the other variables for all the subjects for whom scores were available, and assigning the missing scores on the basis of regression equations. For this analysis, then, a special tape was prepared that included all scores on selected measures for each student.

ORGANIZATION OF THE REMAINDER OF THE STUDY

A general analysis of the retention tables by language groups is the subject of Chapter II of this study. Chapter III is concerned with the socio-economic factors which might be related to retention rates in terms of the language groups. The effects of aptitude and achievement on retention rates are examined in Chapter IV. Chapter V focuses on other factors which might relate to differential retention rates, such as Grade 9 repetition, and ratings of the students by their teachers. The results of the grade-by-grade multiple discriminant analysis and a series of correlation matrices are presented and evaluated in Chapter VI.

⁴See Chapter 6 for technical details of the application of the multiple discriminant analysis.

The final chapter summarizes the findings of the study.

SUMMARY

This chapter has outlined the intent of this study, the specific nature of the problem, and has provided a description of the subjects. Terms which might involve ambiguity were defined, and statistical and general methodological procedures used to process the data were outlined. The remainder of the report concentrates on analysis of a complex of factors that could possibly offer an explanation for secondary school retention differences between three groups of students classified on the basis of language spoken in their homes.

CHAPTER II

LANGUAGE GROUP RETENTION DIFFERENCES

INTRODUCTION

This chapter is concerned with the analysis of the patterns of retention manifested by each of the three language groups. Matters of percentage of retardates still in attendance each year, percentage of students successful in Grade 13 in terms of fifth-year enrolment, and stage of withdrawal are also considered. Retention differences between boys and girls are examined in total and within each language group.¹ Thus it is anticipated that this chapter will provide the basis for succeeding chapters in which a thorough analysis of the variables and complexes of variables associated with differences in retention between the three language groups is attempted.

GRADE RETENTION RATES

General grade retention rates are shown for each of the three language groups in Table II. It was apparent that at all grade levels, the highest retention rate was maintained by those students classified in the Other language group, and the lowest by students in the French

¹The successful movement of the students from grade to grade is noted under the heading "Grade Retention Rates", while the total yearly retention picture is considered under the heading "Yearly Retention Rates". It should be noted that the column on the tables headed "Graduates", refers only to those students who received Honour Graduation Diplomas at the end of five years. A number of students who were retarded in school obtained the Diploma after a period of more than five years attendance.

T A B L E 11

GRADE RETENTION RATES BY LANGUAGE SPOKEN AT HOME

	Grade 9		Grade 10		Grade 11		Grade 12		Grade 13		Graduates		
	N	%	N	%	N	%	N	%	N	%	N	%	
French Spoken At Home	M	2,435	100.0	1,391	57.1	805	33.1	532	21.8	226	9.3	77	3.2
	F	2,415	100.0	1,589	65.8	1,046	43.3	749	31.0	203	8.4	78	3.2
	T	4,850	100.0	2,980	61.4	1,851	38.2	1,281	26.4	429	8.8	155	3.2
English Spoken At Home	M	37,195	100.0	26,017	69.9	18,175	48.9	14,300	38.4	8,679	23.3	4,394	11.8
	F	34,624	100.0	25,942	74.9	19,186	55.4	15,524	44.8	8,358	24.1	5,071	14.6
	T	71,819	100.0	51,959	72.3	37,361	52.0	29,824	41.5	17,017	23.7	9,465	13.2
Another Language Spoken At Home	M	3,004	100.0	2,317	77.1	1,842	61.3	1,554	51.7	1,009	33.6	525	17.5
	F	2,827	100.0	2,226	78.7	1,655	58.5	1,391	49.2	731	25.9	462	16.3
	T	5,831	100.0	4,543	77.9	3,497	60.0	2,945	50.5	1,740	29.8	987	16.9
Total	M	42,634	100.0	29,725	69.7	20,822	48.8	16,386	38.4	9,914	23.3	4,996	11.7
	F	39,866	100.0	29,757	74.6	21,887	54.9	17,664	44.3	9,272	23.3	5,611	14.1
	T	82,500	100.0	59,482	72.1	42,709	51.8	34,050	41.3	19,186	23.3	10,607	12.9

$$\chi^2 \text{ (Grads.)} = 432.10 \text{ (.001)}$$

language group. Differences between English and Other language group and French language group students were most prominent in Grade 13 where there was a ratio of approximately three-to-one favouring the English and Other language groups.

The greatest year-to-year grade enrolment differential occurred after Grade 10 for the English and French language group students, but after Grade 12 for the Other language group students. The ratio of the English and Other language group students to the French language group students still enrolled grew steadily greater throughout the five years of successful grade movement. This progression would suggest that there was no one true point at which French withdrawal rates rose disproportionately to English language withdrawal rates. However, there was a greater tendency for the French and English language group students to leave school after Grade 10 than for students in the Other language group.

Four times as many students in the English language group as in the French language group received Honour Graduation Diplomas after five years of attendance, and five times as many in the Other language group as in the French language group received Diplomas. It is possible to obtain an overview of success on Grade 13 examinations by comparing the totals of graduates with that of the enrolment in Grade 13. Whereas approximately 55 per cent of the English language group and 57 per cent of the Other language group who were enrolled in Grade 13 in the fifth year of the study were successful in obtaining Honour Graduation Diplomas, 36 per cent of the French language group students were successful.²

²Fifth year grade and yearly retention figures were selected for the purposes of comparison because it was in this year that students were faced with Grade 13 Departmental examinations, representing an external and objective measure of secondary school success. It might be argued that fourth year figures would provide more accurate data in view of the fact that (a) some students were in four year courses and (b) some students leave secondary school at the end of Grade 12 to attend university. An examination and comparison of fourth and fifth year data however, indicated that fourth year data would have yielded the same information as fifth year data, as part of a constant and continuing pattern of achievement.

YEARLY RETENTION RATES

Table III presents the numbers of students enrolled in each year of the Carengie study by language group. Within each year, many students were retarded in school by a year or more, while a very small group was accelerated — a total of 86 students. Although yearly retention rates for the English and Other language groups were very similar throughout the five years of the study, by the fifth year proportionately twice as many students in these two groups as in the French language group continued in attendance (51.6 per cent and 56.4 per cent, compared with 27.2 per cent of the French). The withdrawal rate was highest for the French language group after the second year, when 22.2 per cent withdrew, and lowest after the third year, when 13.6 per cent withdrew. On the other hand, the withdrawal rates were greatest for the Other and English language groups after the fourth year when approximately 18 per cent withdrew, and least after the first year when approximately 11 per cent withdrew.

The percentage of students still remaining in school in the sixth year of the study was considerably greater for the English and Other language groups than for the French language group (greater than two-to-one ratio). Since the English and Other language groups had a greater percentage of success in Grade 13, it was not possible to suggest that the reduced percentage of French students still enrolled in the sixth year was a function of a greater success rate on Grade 13 examinations.

By comparing the grade retention and yearly retention rate tables, it is possible to determine the proportion of students in each of the language categories retarded in school by year. Although in Grade 10 16.9 per cent of the English language group and 17.6 per cent of the French

T A B L E III

YEARLY RETENTION RATES BY LANGUAGE SPOKEN AT HOME

	1st Year		2nd Year		3rd Year		4th Year		5th Year		6th Year	
	N	%	N	%	N	%	N	%	N	%	N	%
French Spoken At Home	M 2,435	100.0	1,912	78.5	1,409	57.9	1,067	43.8	675	27.7	244	10.0
	F 2,415	100.0	1,920	79.5	1,348	55.8	1,028	42.6	446	18.5	99	4.1
	T 4,850	100.0	3,832	79.0	2,757	56.8	2,095	43.2	1,121	23.1	343	7.1
English Spoken At Home	M 37,195	100.0	33,163	89.2	28,698	77.2	24,852	66.8	19,192	51.6	8,819	23.7
	F 34,624	100.0	30,880	89.2	25,945	74.9	21,668	62.6	14,273	41.2	3,562	10.3
	T 71,819	100.0	64,043	89.2	54,643	76.1	46,520	64.8	33,465	46.6	12,381	17.2
Another Language Spoken At Home	M 3,004	100.0	2,693	89.6	2,417	80.5	2,187	72.8	1,695	56.4	639	21.3
	F 2,827	100.0	2,501	88.5	2,001	70.8	1,704	60.3	1,079	38.2	239	8.5
	T 5,831	100.0	5,194	89.1	4,418	75.8	3,891	66.7	2,774	47.6	878	15.1
Total	M 42,634	100.0	37,768	88.6	32,524	76.3	28,106	65.9	21,562	50.6	9,702	22.8
	F 39,866	100.0	35,301	88.5	29,294	73.5	24,400	61.2	15,798	39.6	3,900	9.8
	T 82,500	100.0	73,069	88.6	61,818	74.9	52,506	63.6	37,360	45.3	13,602	16.5

 χ^2 (5th Year) = 560.47 (.001)

language group were retarded in school, compared with 11.2 per cent of the Other language group, throughout the remaining three years the numbers of French and Other language group students remaining in school but retarded approximated each other, and were substantially less than those for the English language group. In Grade 12 for example, while 16.2 per cent of the Other language group, and 16.8 per cent of the French language group were retarded in school, 23.3 per cent of the English language group were so retarded. It appeared that failure in school bore a greater relationship to school withdrawal for students in the French and Other language groups than for students in the English language group.

SEX DIFFERENCES IN RETENTION RATES

For the most part there were more boys than girls enrolled in each of the three language groups throughout the six years of the study (Table III). Although similar proportions of girls and boys in the French language group graduated after five years in attendance, more girls than boys in the English language group and more boys than girls in the Other language group graduated. Generally speaking, the girls in the English and French language groups were more successful than the boys (i.e., they had greater success moving from grade to grade), but after Grade 10 in the Other language group, they were less successful than the boys. More girls than boys by proportion of all three language groups withdrew after Grade 12.

Using the ratio of Honour Graduation Diplomas to Grade 13 enrolment as a measure of success on Grade 13 examinations, it appeared that the girls in the English and Other language groups were more successful than the boys, and the girls and boys in the French language group

performed equally well.

Retention differences between the boys and the girls are discussed in the remainder of the study only when differences appear to be pertinent. The above summary should be taken into consideration when evaluating materials that are presented in the remainder of the report. (Sex breakdowns have been provided in the tables that accompany the text).

SUMMARY

This chapter has noted the differences in grade and yearly retention rates between the language groups in total and in terms of sex, in order to set the scene for later comparisons of these factors within each of the socio-economic and other classifications. Comparative ratios were introduced for the purpose of comparing proportions of students in each of the language groups enrolled in the fifth year of the study or graduating after five years with Honour Graduation Diplomas (using Grade 9 enrolment as the base). It was noted that there were substantial differences in retention between the three language groups, particularly with regard to the low retention rate figures for the French language group. Sex differences were present, but were not found to be prominent.

CHAPTER III

SOCIO - ECONOMIC VARIABLES

INTRODUCTION

This chapter explores the main theme of the investigation: Can retention differences between the three language groups be accounted for by their differential representation in socio-economic classifications commonly associated with school withdrawal? Since it was expected that retention rates would vary in terms of the socio-economic classifications, attention was specifically focused on ratios based on the relative enrolment from each language group in the fifth year of the study (in terms of the percentage remaining from the first year enrolment), and the relative proportions of each language group which acquired Honour Graduation Diplomas. The comparisons between these latter ratios were considered to be quite significant, in that the Grade 13 examination represented the first externally administered evaluation of formal educational achievement and success, while enrolment in Grade 13 was essentially a function of the measuring devices of the local school system.

This chapter also analyzes differences among the three language categories from the point of view of the teachers', parents', and friends' suggestions for the student's future educational plans as well as the student's own, as specified in the Grade 9 Student Questionnaire. It is assumed that different value systems represented within the three language groups could engender different types of occupational goals.

FATHER'S OCCUPATION

A comparison of language group responses to Item No. 6 of the Grade 9 Student Questionnaire: "To which of these groups does the principal occupation of your father or guardian belong?" is presented in Table IV.¹ The greatest difference between the English and French groups appeared in the "Executive" and "Professional" classifications, in which significantly greater proportions of the English language group students classified their fathers or guardians. In the French language group, greater proportions of students placed their fathers or guardians in the "Farm" classification than the English and Other language groups, while the Other language group was disproportionately over-represented in the "Factory Work" classification.

Yearly retention rates relative to each occupational classification are presented in Tables XLVIII to LVII. In the fifth year, the proportions of English and Other language group enrolments were very similar and were approximately twice as great as the enrolment in the French language group throughout all occupational classifications. In the occupational classification "Professional," the proportion of fathers and guardians assigned to this classification by the French language group students was small, but even here a two-to-one proportionate ratio favouring the English language group appeared in the fifth year (Table XLVIII). In the occupational classifications "Executive" and "Farm," a similar ratio appeared (Tables XLIX and

¹Before dwelling on the relative proportions of students from each of the occupational classifications, it should be noted that more than 20 per cent of the French language group indicated that their fathers' occupations were something other than the occupational classifications that appear in the list that was provided, as opposed to approximately 15 per cent in the English language group, and 13 per cent in the Other language group.

TABLE IV

PROPORTION OF LANGUAGE GROUP IN EACH FATHERS' OCCUPATION CLASSIFICATION

Occupation	French		English		Other		Total	
	N	%	N	%	N	%	N	%
Factory Work	993	21.5	14,320	20.6	1,965	34.7	17,278	21.6
Skilled Trade	931	20.1	12,587	18.1	1,379	24.3	14,897	18.6
Office Work	273	5.9	5,524	7.9	120	2.1	5,917	7.4
Small Business	269	5.8	4,759	6.8	378	6.7	5,406	6.8
Salesman	193	4.2	4,446	6.4	134	2.4	4,773	6.0
Farm	631	13.6	7,063	10.1	543	9.6	8,237	10.3
Executive	141	3.0	5,472	7.9	130	2.3	5,743	7.2
Professional	84	1.8	3,501	5.0	153	2.7	3,738	4.7
Other	955	20.6	10,580	15.2	725	12.8	12,260	15.3
Do Not Know	157	3.4	1,409	2.0	140	2.5	1,706	2.1
Total	4,627	100.0	69,661	100.0	5,667	100.0	79,955	100.0

$$\chi^2 = 1723.83 (.001, 18 \text{ df})$$

LIII). The fifth year enrolment throughout all occupational classifications showed a proportionate ratio of approximately two-to-one in favour of the English and Other language categories.

The Grade Retention Rate Tables (Tables LVIII to LXVII) show that in all the occupational classifications except "Factory Work," the proportionate ratio of English language group to French language group graduates varied between three- and five-to-one. In the "Factory Work" classification, the ratio was approximately two-to-one (Table LXV). The difference between the French language group and the Other language group on the basis of fifth-year graduates favoured the Other language group by an even greater margin.

The data clearly indicated that secondary school success is related to some extent to father's occupation. However, in view of the fact that the proportionate ratio of English, French, and Other language group enrolment and graduation rate remained constant through all occupational classifications, it appears that differences in retention rates and numbers of graduates among the three language groups cannot be attributed to differential group representation in occupational classifications.

SIZE OF COMMUNITY

A breakdown of the three language groups in terms of the size of the municipality in which the school was located where the student was originally enrolled in 1959 is presented in Table V. The "Unorganized" classification refers to students enrolled in schools of a temporary nature, or schools serviced by mobile units (Table LXVIII). Over 32 per cent of the French language group was located in communities of less than 6,000 population (Table LXIX).

TABLE V

SIZE OF MUNICIPALITIES IN WHICH STUDENTS ENROLLED IN GRADE 9
BY LANGUAGE GROUPS

	French		English		Other		Total	
	N	%	N	%	N	%	N	%
Up to 999	156	3.2	1,425	2.0	67	1.2	1,648	2.0
1,000 to 1,999	355	7.3	4,537	6.3	187	3.2	5,079	6.2
2,000 to 5,999	1,054	21.7	11,748	16.4	642	11.0	13,444	16.3
6,000 to 14,999	478	9.9	9,584	13.3	630	10.8	10,692	13.0
15,000 to 109,999	1,507	31.0	20,894	29.1	1,554	26.7	23,955	29.0
110,000 to 599,999	1,034	22.4	17,242	24.0	1,338	22.9	19,664	23.8
600,000 and over	67	1.4	6,161	8.6	1,384	23.7	7,612	9.2
Stations, Camps		.0		.0		.0		.0
Unorganized	149	3.1	228	.3	29	.5	406	.5
Total	4,850		71,819		5,831		82,500	

$$\chi^2 = 2819.33 (.001, 16 \text{ df})$$

to LXXI), as opposed to 24.7 per cent of the English language group, and 15.4 per cent of the Other language group. Similar proportions of the three language groups were enrolled in the communities ranging in size from 6,000 to 599,999 (Tables LXXII to LXXIV), while 23.7 per cent of the Other language group students were enrolled in schools in communities of 600,000 and over (Metropolitan Toronto), as opposed to 8.6 per cent of the English language group students, and 1.4 per cent of the French language group students (Table LXXV). Slightly over 3 per cent of the total French language group fell into the "Unorganized" classification, but the proportion of English and Other language group students in this classification was considerably smaller.

Both fifth-year enrolment figures and graduate totals for students in each of the population classifications are presented in Tables LXVIII to LXXV. The relative proportions of English to French language group students in communities of populations under 6,000 still enrolled in the fifth year of the study was slightly more than two-to-one. The proportionate ratio of graduates in this classification ranged from two-to-one to four-to-one favouring the English language group. In the "600,000 and over" population classification, the English to French ratio in the fifth year of enrolment was slightly less than two-to-one, but the ratio of graduates was nearly four-to-one (Table LXXV). Throughout the remainder of the classifications, similar ratios were found to exist.

Since retention and graduation proportionate ratios remained relatively constant through all population classifications, it can be assumed that, although the size of the community was found to be very slightly related to school retention, this factor does not appear to be associated with retention.

differences among the three language groups.

PARENTS' EDUCATION

The raw data used to prepare Tables LXXVI to LXXX were derived from the responses to Item No. 13 on the Grade 9 Student Questionnaire: "How much education did your father have?" It can readily be seen from Table VI that there were pronounced differences between the three language groups on the basis of parental education. In the French language group, 68.2 per cent of the students indicated that their fathers did not attend secondary school at all, as opposed to 39.0 per cent of the English language group, and 56.7 per cent of the Other language group. Correspondingly, proportionately fewer of the male parents of the French language group students than of the English language group students attended secondary school, and fewer completed university (Tables LXXVII to LXXX). The differences between the French language group and the Other language group on this factor were the greatest in the "Completed Secondary School" classification (French, 8.0 per cent; Other, 17.2 per cent) and in the "University Degree" classification (French, 3.5 per cent; Other, 6.0 per cent).

Although the differences between the retention rates of the English and French language group students could be partly explained in terms of the lower educational level of the latter's parents, yet the enrolment differences between the French and the Other language groups were greater than two-to-one in terms of fifth-year enrolment (Table LXXVI). Within the "No Secondary School" classification, the English language group had three times as many graduates as the French language group; the Other language group six times as many. The proportionate ratios of English and Other language group student

TABLE VI
EXTENT OF FATHERS' EDUCATION BY LANGUAGE GROUPS

		French		English		Other		Total	
		N	%	N	%	N	%	N	%
No Secondary School	M	1,422	66.2	12,244	37.7	1,415	56.1	15,081	40.7
	F	1,519	70.2	11,918	40.3	1,341	57.5	14,778	43.4
	T	2,941	68.2	24,162	39.0	2,756	56.7	29,859	42.0
Part Secondary School	M	399	18.6	10,415	32.2	445	17.6	11,259	30.4
	F	368	17.0	9,320	31.6	400	17.1	10,088	29.7
	T	767	17.8	19,735	31.9	845	17.4	21,347	30.0
Complete Secondary School	M	188	8.8	6,236	19.3	451	17.9	6,875	18.6
	F	157	7.3	5,378	18.2	383	16.4	5,918	17.4
	T	345	8.0	11,614	18.8	834	17.2	12,793	18.0
Part University	M	57	2.7	838	2.6	63	2.5	958	2.6
	F	50	2.3	707	2.4	68	2.9	825	2.4
	T	107	2.5	1,545	2.5	131	2.7	1,783	2.5
University Degree	M	79	3.7	2,641	8.2	150	5.9	2,870	7.7
	F	70	3.2	2,201	7.5	142	6.1	2,413	7.1
	T	149	3.5	4,842	7.8	292	6.0	5,283	7.5
Total	M	2,145	100.0	32,374	100.0	2,524	100.0	37,043	100.0
	F	2,164	100.0	29,524	100.0	2,334	100.0	34,022	100.0
	T	4,309	100.0	61,898	100.0	4,858	100.0	71,065	100.0
No Answer	M	290	11.9	4,821	12.9	480	15.9	5,591	13.1
	F	251	10.4	5,100	14.7	493	17.4	5,844	14.7
	T	541	11.2	9,921	13.8	973	16.7	11,435	13.9
Final Total	M	2,435		37,195		3,004		42,634	
	F	2,415		34,624		2,827		39,866	
	T	4,850		71,819		5,831		82,500	

$$\chi^2 = 2009.89 (.001, 8 \text{ df})$$

to those of the French language group enrolled in the fifth year increased slightly as the length of father's education increased, while the ratios in terms of the number of graduates ranged from three-to-one to six-to-one (Tables LXXVII to LXXX).

In view of the fact that school retention can be shown to be somewhat related to the extent of the father's education, there is no doubt that the high representation of the French group in the "No Secondary School" father's educational classification is associated with the lower retention and graduate figures for this group. However, the relatively low attrition rate in the Other language group cannot be explained in terms of this factor.

The pattern of the mother's education¹ was very similar to that of father's education in the three language groups, although, generally, fewer of the mothers attended university. More, however, completed secondary school (Table VII). More than twice as many mothers of students in the French language group as in the English language group had no secondary school education, the difference between the English language group and the French language group being approximately the same for the "Mother's Education" as for the "Father's Education" classification. The French and Other language groups demonstrated similar proportional distribution throughout the "Mother's Education" classification. Despite this fact, a two-to-one ratio of fifth year enrolment was maintained between the students in the Other language group and those in the French language group in the "No Secondary School" classification (LXXXI). In this classification, the proportion of graduates was

¹This was determined by assessing student responses to Item No. 14 of the Grade 9 Student Questionnaire: "How much education did your mother have?"

TABLE VII
EXTENT OF MOTHERS' EDUCATION BY LANGUAGE GROUPS

		French		English		Other		Total	
		N	%	N	%	N	%	N	%
No Secondary School	M	1,349	62.6	9,610	29.9	1,497	59.6	12,456	33.9
	F	1,471	66.6	10,305	33.7	1,488	61.5	13,264	37.6
	T	2,820	64.7	19,915	31.7	2,985	60.5	25,720	35.7
Part Secondary School	M	441	20.5	11,488	35.8	449	17.9	12,378	33.6
	F	437	19.8	11,091	36.1	411	17.1	11,939	33.9
	T	878	20.1	22,579	36.0	860	17.4	24,317	33.8
Complete Secondary School	M	290	13.5	9,100	28.4	480	19.1	9,870	26.9
	F	255	11.5	7,752	25.3	419	17.3	8,426	23.9
	T	545	12.5	16,852	26.9	899	18.3	18,296	25.4
Part University	M	28	1.3	584	1.8	43	1.7	655	1.8
	F	11	.6	514	1.8	42	1.7	567	1.6
	T	39	.9	1,098	1.8	85	1.7	1,222	1.7
University Degree	M	45	2.1	1,309	4.1	43	1.7	1,397	3.8
	F	34	1.5	945	3.1	58	2.4	1,037	3.0
	T	79	1.8	2,254	3.6	101	2.1	2,434	3.4
Total	M	2,153	100.0	32,091	100.0	2,512	100.0	36,756	100.0
	F	2,208	100.0	30,607	100.0	2,418	100.0	35,233	100.0
	T	4,361	100.0	62,698	100.0	4,930	100.0	71,989	100.0
No Answer	M	282	11.6	5,104	13.7	492	16.4	5,878	13.8
	F	207	8.6	4,017	11.6	409	14.5	4,633	11.6
	T	489	10.1	9,121	12.7	901	15.5	10,511	12.7
Final Total	M	2,435		37,195		3,004		42,634	
	F	2,415		34,624		2,827		39,866	
	T	4,850		71,819		5,831		82,500	

χ^2 3393.29 (.001, 8 df)

two-and-one-half times less in the French language group than the English and more than four times less than the Other language group.

The two-to-one fifth year enrolment ratio of English and Other language group students to those in the French language group was maintained in the "Partial Secondary School" and "Complete Secondary School" educational classifications, as was the three- or four-to-one ratio in the "Graduate" category (Tables LXXXII and LXXXIII). The two-to-one enrolment ratio was reduced slightly for students whose mothers were in the classification "Partial University" or "University Degree." However, graduate ratios still noticeably favoured the English and Other language groups (Tables LXXXIV and LXXXV).

Retention differences between the English and French language groups can be explained to some extent by the far greater proportions of the French language group to be found in the low-retention parental education classification "No Secondary School." Retention differences between the French and Other language groups cannot be explained in terms of this factor.

GEOGRAPHIC LOCATION¹

The "location of the school" referred to in Table VIII is the location of the school of the student's original enrolment in Grade 9. Four of the five geographical locations used were selected because they contained a high proportion of French-speaking students. The fifth geographical location, the "Rest of Ontario," contained approximately 17 per cent of the total French student population, but more than 80 per cent of the English and Other language groups.

¹See Figure 1 in Chapter 1 for details of geographic breakdown.

TABLE VIII

GEOGRAPHICAL LOCATION OF SCHOOLS IN WHICH STUDENTS WERE ORIGINALLY ENROLLED
BY LANGUAGE GROUPS

	French		English		Other		Total	
	N	%	N	%	N	%	N	%
City A	1,109	22.9	3,087	4.3	122	2.1	4,318	5.2
City B	342	7.1	539	.8	24	.4	905	1.1
Ottawa Valley	739	15.2	1,520	2.1	36	.6	2,295	2.8
Northern Ontario	1,817	37.4	8,620	12.0	747	12.8	11,184	13.6
Rest of Ontario	843	17.4	58,053	80.8	4,902	84.1	63,798	77.3
Total	4,850	100.0	71,819	100.0	5,831	100.0	82,500	100.0

$$\chi^2 = 12276.84 (.001, 8 \text{ df})$$

From Table VIII, it can be seen that in City A (a major city located in the Ottawa Valley, and theoretically bilingual in nature), the ratio of the French language group to the English language group was about one-to-three, while representation from the Other language group was negligible.

In this city, retention rates were generally lower for the French language group than the mean for this group for all Ontario, but higher for the English language group (Table LXXXVI). Fifth year enrolment for the French language group was 20.0 per cent of the original enrolment, while in the English-speaking category, it was 55.6 per cent of the original enrolment. The number of graduates after five years of secondary school was less than 2 per cent for the French language group, and 15.5 per cent for the English language group. Although it might be expected that in a supposedly bilingual city such as this, the French-speaking student would have a greater chance of secondary school success, the opposite appeared to be true.

City B (a small city in Eastern Ontario, with a fairly high concentration of French language population), although it contained just 1 per cent of Ontario's Grade 9 population, contained over 7 per cent of the French language group students. The numbers in the Other language category in City B were too small to be considered in this comparison. Fifth year enrolments in both the French language group and English language group were higher than the Ontario mean, but surprisingly, the number of five-year graduates was lower. The differences between the retention rates for the English and French language groups were lower than the differences between the Ontario means for the two language groups, but were still prominent (Table LXXXVII).

Retention rates in the Ottawa Valley (Table LXXXVIII) were generally

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Retention rates in the Ottawa Valley (Table LXXXVIII) were generally

lower than the means for Ontario, but again the English language group contained approximately twice as many fifth year students as the French language group. The percentage of graduates after five years was less in the Ottawa Valley than the Ontario means for all three language groups, particularly for the English language group, in which it was 4 per cent less. Significant differences, however, between the English and the French language groups, in terms of the number of graduates after five years, were maintained.

Over 37 per cent of the French-speaking students were originally enrolled in schools in Northern Ontario, so that it is not surprising to see the retention rates and numbers of graduates very similar to the Ontario means (Table LXXXIX). Again, the enrolment in the fifth year was twice as great proportionately for the English language group as for the French language group, though less than the Ontario mean. The Other language category was well represented in Northern Ontario with 747 students. The fifth year enrolment and the number of graduates after five years were quite similar to those obtained for this language group throughout the remainder of the province.

The geographic location "Rest of Ontario" refers to most of Southern Ontario, except for the districts previously discussed. The greatest proportions of the English language and Other language group students were represented in this geographic district, but only 17.4 per cent of the French language group was represented (Table XC). Fifth year enrolment for the French language group was somewhat higher than for the rest of the geographic districts (except City B), although the differences between the English and French language groups were still quite substantial.

Throughout the comparison of retention rates on the basis of geographic location of schools of original enrolment, it was quite apparent that the English language group enrolment was commonly twice as great in the fifth year as the French language group enrolment, and that there was a three- or four-to-one ratio of English graduates maintained (eight-to-one in City A).

It appears that differences in retention rates between the English and French language group students cannot be simply explained by a differential representation of French language group students in arbitrarily selected districts where general retention rates were significantly different from those in other parts of Ontario.

NUMBER OF CHILDREN

Table IX presents a breakdown of the student population by the three language groups in terms of the number of children in each student's family. Whereas 57.9 per cent of the French language group students came from families of five or more children, 26.0 per cent of the English language group and 22.8 per cent of the Other language group were so classified. Correspondingly, the English and Other language groups had far greater representation in the one- and two-child family classifications.

Generally, fifth year enrolments were greater than the total mean in the one- two- and three-child classifications, but here the French language group had slightly more than one-half the enrolment, by proportion, of the other two groups (Tables XCI to XCIII). In these small-family classifications, the ratio of English and Other language group graduates to that of the French language group ranged from about three-to-one to five-to-one. The "Four

TABLE IX
NUMBER OF CHILDREN IN STUDENTS' FAMILIES BY LANGUAGE GROUPS

		French		English		Other		Total	
		N	%	N	%	N	%	N	%
One Child	M	90	3.8	3,364	9.1	374	12.6	3,828	9.1
	F	111	4.7	2,854	8.4	328	11.7	3,293	8.4
	T	201	4.2	6,218	8.7	702	12.2	7,121	8.8
Two Children	M	221	9.2	9,347	25.4	826	27.7	10,394	24.7
	F	221	9.3	8,450	24.6	811	28.9	9,482	24.0
	T	442	9.3	17,797	25.1	1,637	28.4	19,876	24.3
Three Children	M	330	13.8	8,681	23.6	688	23.1	9,699	22.9
	F	315	13.2	7,998	23.3	637	22.8	8,950	22.6
	T	645	13.5	16,679	23.5	1,325	22.9	18,649	22.8
Four Children	M	363	15.2	6,206	16.9	409	13.8	6,978	16.6
	F	357	15.0	5,699	16.6	382	13.7	6,438	16.3
	T	720	15.1	11,905	16.7	791	13.7	13,416	16.4
Five or More Children	M	1,392	58.0	9,190	25.0	677	22.8	11,259	26.7
	F	1,378	57.8	9,303	27.1	640	22.9	11,321	28.7
	T	2,770	57.9	18,493	26.0	1,317	22.8	22,580	27.7
Total	M	2,396	100.0	36,788	100.0	2,974	100.0	42,158	100.0
	F	2,382	100.0	34,304	100.0	2,798	100.0	39,484	100.0
	T	4,778	100.0	71,092	100.0	5,772	100.0	81,642	100.0
No Answer	M	39	1.6	407	1.1	30	1.0	476	1.1
	F	33	1.4	320	.9	29	1.0	382	1.0
	T	72	1.5	727	1.0	59	1.0	858	1.1
Final Total	M	2,435		37,195		3,004		42,634	
	F	2,415		34,624		2,827		39,866	
	T	4,850		71,819		5,831		82,500	

Children in the Family" classification had generally lower enrolments and percentage graduates, but the proportionate ratios of the three language groups remained much the same as those obtained for the other three classifications (Table XCIV). The percentage enrolment figures in the fifth year for the classification "Five or More Children in the Family" were closer together than the Ontario means for the three language groups, but the English and Other language groups still retained a substantial margin by proportion (Table XCV: French, 20.0 per cent; English, 33.3 per cent; and Other, 34.9 per cent). Within this classification, the number of graduates was reduced considerably, particularly with regard to the English language group, but the ratio of English to French graduates was still greater than two-to-one.

There was a substantial relationship demonstrated between school retention and the number of children in the students' families. It was also discovered that family size effectively discriminated between the French language group and the English and Other language group students. However, the fact that proportionate ratios were maintained throughout all the "Number of Children in the Family" classifications, between the English and Other language groups and the French language group in terms of fifth year enrolments and percentage of Honour Graduation Diplomas, indicates that this particular socio-economic factor--family size--does not offer sufficient explanation for the retention differences between the three language groups.

FUTURE PLANS OF STUDENTS

Table X presents a summary of the students' future educational plans.¹

¹This was determined by assessing student responses to Item No. 13 of the Grade 9 Student Questionnaire: "Which one of the following courses of action best describes your own plans?"

STUDENTS' OWN FUTURE EDUCATIONAL PLANS BY LANGUAGE GROUPS

		French		English		Other		Total	
		N	%	N	%	N	%	N	%
Complete Sec-	M	722	30.3	14,837	40.7	1,269	43.1	16,828	40.3
ondary School	F	299	12.6	5,939	17.5	535	19.3	6,773	17.3
- University	T	1,021	21.5	20,776	29.5	1,804	31.5	23,601	29.2
Complete Sec-	M	125	5.2	1,310	3.6	101	3.4	1,536	3.7
ondary School	F	487	20.4	5,665	16.6	448	16.1	6,600	16.9
- Teacher	T	612	12.9	6,975	9.9	549	9.6	8,136	10.1
Complete Sec-	M	11	.5	114	.3	9	.4	134	.3
ondary School	F	442	18.7	6,016	17.7	305	11.0	6,763	17.3
- Nursing	T	453	9.5	6,130	8.7	314	5.5	6,897	8.5
Complete Sec-	M	565	23.7	6,945	19.1	676	23.0	8,186	19.6
ondary School	F	169	7.1	2,249	6.6	207	7.5	2,625	6.7
- Tech.Train.	T	734	15.4	9,194	13.1	883	15.5	10,811	13.4
Complete Sec-	M	363	15.2	4,807	13.2	295	10.0	5,465	13.1
ondary School	F	451	19.1	6,954	20.5	657	23.7	8,062	20.6
- Job	T	814	17.2	11,761	16.7	952	16.6	13,527	16.7
Leave School	M	104	4.4	1,470	4.0	88	3.0	1,662	4.0
for Trade	F	63	2.7	1,005	3.0	81	2.9	1,149	2.9
Training	T	167	3.5	2,475	3.5	169	3.0	2,811	3.5
Leave School	M	89	3.7	935	2.6	53	1.8	1,077	2.6
for a	F	101	4.4	949	2.8	73	2.6	1,123	2.9
Job	T	190	4.0	1,884	2.7	126	2.2	2,200	2.7
Other	M	405	17.0	6,014	16.5	450	15.3	6,869	16.4
Plans or	F	355	15.0	5,211	15.3	468	16.9	6,034	15.4
Undecided	T	760	16.0	11,225	15.9	918	16.1	12,903	15.9
Total	M	2,384	100.0	36,432	100.0	2,941	100.0	41,757	100.0
	F	2,367	100.0	33,988	100.0	2,774	100.0	39,129	100.0
	T	4,751	100.0	70,420	100.0	5,715	100.0	80,886	100.0
No	M	51	2.0	763	2.0	63	2.1	877	2.1
Answer	F	48	2.0	636	1.8	53	1.9	737	1.8
	T	99	2.0	1,399	1.9	116	2.0	1,614	2.0
Final Total	M	2,435		37,195		3,004		42,634	
	F	2,415		34,624		2,827		39,866	
	T	4,850		71,819		5,831		82,500	

$$\chi^2 = 299.40 \text{ (.001, 14 df)}$$

There were no particularly striking differences apparent in the future plans indicated by students in the three language groups. Similar proportions of the three language groups were "Undecided" or had plans other than the alternatives that were listed. As well, the classifications "Complete secondary school, then take technical or trade training," "Complete secondary school, then obtain a job or work at home," and "Leave school as soon as possible to enter trade training" had similar representation from each of the three language groups. A greater proportion of the English and Other language group students looked forward to a university education than the French language group (English, 29.5 per cent; Other, 31.5 per cent; French, 21.5 per cent), while the proportion of the French language group which indicated a preference for the teaching profession was slightly higher than the other two groups. A slightly greater proportion of the French language students than those in the other two groups indicated that they planned to leave school for a job.

As might have been expected, there was a pronounced difference between the boys and girls in each of these classifications, but these differences seemed to appear within all three language groups in similar proportions. More boys than girls indicated an interest in attending university and going into technical training after secondary school, and more girls indicated an interest in nursing and teaching careers.

The students' concepts of their parents' suggestions for their future course of action are summarized in terms of each language group in Table XI.¹

¹This was determined by assessing student responses to item No. 15 of the Grade 9 Student Questionnaire: "Of the following courses of action in regard to your future educational and work plans, which best describes what your parents or guardian suggest you should do?"

TABLE XI
PARENTS' SUGGESTIONS FOR FUTURE EDUCATIONAL PLANS BY LANGUAGE GROUPS

		French		English		Other		Total	
		N	%	N	%	N	%	N	%
Complete Secondary School - University	M	742	31.2	15,875	43.7	1,294	44.2	17,911	43.1
	F	307	13.0	6,415	18.9	565	20.3	7,287	18.7
	T	1,049	22.1	22,290	31.7	1,859	32.5	25,198	31.3
Complete Secondary School - Teacher	M	144	6.1	1,339	3.7	96	3.3	1,579	3.8
	F	497	21.0	5,504	16.3	438	15.7	6,439	16.5
	T	641	13.5	6,843	9.8	534	9.4	8,018	9.9
Complete Secondary School - Nursing	M	10	.4	100	.3	7	.3	117	.3
	F	401	17.0	5,568	16.4	262	9.4	6,231	16.0
	T	411	8.7	5,668	8.1	269	4.7	6,348	7.9
Complete Secondary School - Tech. Training	M	499	21.0	5,858	16.1	562	19.2	6,919	16.6
	F	102	4.3	1,769	5.2	135	4.8	2,006	5.1
	T	601	12.7	7,627	10.9	697	12.2	8,925	11.1
Complete Secondary School - Job	M	312	13.1	3,938	10.8	264	9.0	4,514	10.8
	F	388	16.4	6,149	18.2	583	20.9	7,120	18.2
	T	700	14.8	10,087	14.4	847	14.8	11,634	14.4
Leave School for Trade Training	M	73	3.1	835	2.3	77	2.6	985	2.4
	F	38	1.6	615	1.8	61	2.2	714	1.8
	T	111	2.3	1,450	2.1	138	2.4	1,699	2.1
Leave School for a Job	M	74	3.1	452	1.3	53	1.8	579	1.4
	F	72	3.0	491	1.5	85	3.1	648	1.7
	T	146	3.1	943	1.3	138	2.4	1,227	1.5
Other Plans or Undecided	M	522	22.0	7,906	21.8	574	19.6	9,002	21.6
	F	560	23.7	7,354	21.7	656	23.6	8,570	22.0
	T	1,082	22.8	15,260	21.7	1,230	21.6	17,572	21.8
Total	M	2,376	100.0	36,303	100.0	2,927	100.0	41,606	100.0
	F	2,365	100.0	33,865	100.0	2,785	100.0	39,015	100.0
	T	4,741	100.0	70,168	100.0	5,712	100.0	80,621	100.0
No Answer	M	59	2.4	892	2.4	77	2.6	1,028	2.4
	F	50	2.1	759	2.2	42	1.5	851	2.1
	T	109	2.3	1,651	2.3	119	2.0	1,879	2.3
Grand Total	M	2,435		37,195		3,004		42,634	
	F	2,415		34,624		2,827		39,866	
	T	4,850		71,819		5,831		82,500	

Again there were no striking differences in student perceptions of their parents' plans for them. For example, 71.8 per cent of the French language group students felt that their parents wanted them to complete high school, compared with 74.9 per cent of the English language group, and 73.6 per cent of the Other language group students. It should be noted, however, that greater proportions of students in the English and Other language groups than in the French language group indicated that parents would suggest the university education alternative (French, 22.1 per cent; English, 31.7 per cent; Other, 32.5 per cent), but the nursing, technical training, or a job after secondary school were indicated by similar proportions across the three language groups. Similar proportions of the parents from each of the three language groups were indicated as suggesting that their offspring leave school for trade training, while slightly more of the French language group than the other two language groups indicated that their parents would like them to leave school for a job. Student perceptions of parents' suggestions for the future educational plans of their children closely approximated those of the students' plans for themselves, though students generally perceived their parents' expectations as being slightly lower than their own in terms of university orientation.

Student perceptions of teachers' suggestions for future plans are summarized for the three language groups in Table XII.¹ French language group students more often ventured to assess teachers' suggestions for their

¹This was determined by assessing student responses to Item No. 16 on the Grade 9 Student Questionnaire: "Which one of the following courses of action best describes what your teachers suggest you should do?"

TABLE XII

TEACHERS' SUGGESTIONS FOR FUTURE EDUCATIONAL PLANS BY LANGUAGE GROUPS

		French		English		Other		Total	
		N	%	N	%	N	%	N	%
Complete Sec- ondary School - University	M	717	33.6	9,909	32.1	862	34.9	11,488	32.3
	F	345	16.3	4,758	16.9	429	18.6	5,532	17.0
	T	1,062	24.9	14,667	24.8	1,291	27.1	17,020	25.0
Complete Sec- ondary School - Teacher	M	108	5.1	697	2.3	68	2.8	873	2.5
	F	417	19.7	3,451	12.3	288	12.5	4,156	12.7
	T	525	12.4	4,148	7.0	356	7.5	5,029	7.4
Complete Sec- ondary School - Nursing	M	6	.3	44	.1	4	.2	54	.2
	F	278	13.1	2,648	9.4	121	5.3	3,047	9.3
	T	284	6.7	2,692	4.6	125	2.6	3,101	4.6
Complete Sec- ondary School - Tech.Train.	M	407	19.1	3,711	12.0	370	15.0	4,488	12.6
	F	99	4.7	1,072	3.8	96	4.2	1,267	3.9
	T	506	11.9	4,783	8.1	466	9.8	5,755	8.4
Complete Sec- ondary School - Job	M	151	7.1	1,777	5.7	115	4.7	2,043	5.7
	F	211	9.9	3,131	11.1	303	13.2	3,645	11.2
	T	362	8.5	4,908	8.3	418	8.8	5,688	8.3
Leave School for Trade Training	M	46	2.2	539	1.7	37	1.5	622	1.8
	F	29	1.4	336	1.2	14	.6	379	1.2
	T	75	1.8	875	1.5	51	1.1	1,001	1.5
Leave School for a Job	M	30	1.4	247	.8	21	.9	298	.8
	F	25	1.2	174	.6	19	.8	218	.7
	T	55	1.3	421	.7	40	.8	516	.8
Other Plans or Undecided	M	666	31.2	14,010	45.3	989	40.0	15,665	44.1
	F	715	33.7	12,606	44.7	1,032	44.8	14,353	44.0
	T	1,381	32.5	26,616	45.0	2,021	42.3	30,018	44.0
Total	M	2,131	100.0	30,934	100.0	2,466	100.0	35,531	100.0
	F	2,119	100.0	28,176	100.0	2,302	100.0	32,597	100.0
	T	4,250	100.0	59,110	100.0	4,768	100.0	68,128	100.0
No Answer	M	304	12.5	6,261	16.8	538	17.9	7,103	16.7
	F	296	12.3	6,448	18.6	525	18.6	7,269	18.2
	T	600	12.4	12,709	17.7	1,063	18.3	14,372	17.5
Final Total	M	2,435		37,195		3,004		42,634	
	F	2,415		34,624		2,827		39,866	
	T	4,850		71,819		5,831		82,500	

$$\chi^2 = 494.23 (.001, 14 \text{ df})$$

future. While 40.8 per cent of students in the French language group indicated an uncertain estimation of teachers' plans for them, 54.8 per cent of the English language group and 52.9 per cent of the Other language group students responded in this manner. Generally, the French language group students noted significantly more often that teachers suggested completion of secondary school (French, 64.4 per cent; English, 52.8 per cent; Other, 55.8 per cent). However, for those students who could give a specific estimation of teachers' vocational suggestions, the picture is reversed: while 89.2 per cent of the French language group students who could give a definite answer felt that teachers wanted them to complete high school, 96.0 per cent of the English and 96.7 per cent of the Other language group students felt this way.

More specifically, as percentages for the whole group in Table XII show, approximately the same percentage of students in the French and English language groups indicated that they felt that their teachers would recommend university education (24.9 per cent and 24.8 per cent respectively), while a slightly higher proportion (27.1 per cent) of the Other language group students felt this to be true. Greater proportions of the French language group students indicated a teacher emphasis in the classifications "Teaching," "Nursing," and "Technical Training" upon completion of secondary school. It should be noted that, since the three language groups were similarly represented in the "Leave School" classifications, the differences between the groups which appeared in the "Complete High School" classifications were accounted for by the fact that a far greater percentage of the English and Other language group students did not specify teachers' suggestions for the future.

It was in the classification "Friends' Future Educational Plans" that the differences between the language groups became most apparent. (Table XIII).¹ In a general sense, similar proportions of students in each language group indicated that their friends were planning to complete secondary school (French, 70.6 per cent; English, 67.2 per cent; Other, 69.7 per cent). While similar proportions of the English and Other language group students indicated that their circle of friends was largely interested in attending university (English, 24.5 per cent; Other, 26.3 per cent), 17.7 per cent of the French language group students indicated that their friends were university oriented. The French language group students again emphasized the teaching, nursing, and technical training classifications. The "Complete secondary school, then obtain a job or work at home," "Leave school as soon as possible to enter trade training," and "Leave school as soon as possible to take a job or work at home" classifications had similar representations from each of the language groups, although the French representation in the "Leave school" categories was slightly higher than that of the other two groups. Sex differences were pronounced, but were similar within each language group.

Certain differences in values held by students in the three language groups which might be integrally related to success differential at the secondary school level might be inferred from the data on "Future Plans." The data indicated that all three groups were equally positive about completing secondary school, although there was a slightly greater tendency among French language group students to consider the possibilities of leaving school. This might

¹Students were asked in Item No. 17 of the Grade 9 Student Questionnaire to give an estimate of their friends' future educational and vocational plans: "Which one of the following courses of action best describes the plans of most of your school friends?"

FRIENDS' FUTURE EDUCATIONAL PLANS BY LANGUAGE GROUPS

		French		English		Other		Total	
		N	%	N	%	N	%	N	%
Complete	M	562	25.4	11,007	32.8	957	35.4	12,526	32.6
Secondary	F	221	9.9	4,958	15.7	426	16.7	5,605	15.4
School -	T	783	17.7	15,965	24.5	1,383	26.3	18,131	24.2
University									
Complete	M	93	4.2	558	1.7	54	2.0	705	1.9
Secondary	F	458	20.5	4,240	13.4	328	12.9	5,026	13.8
School -	T	551	12.4	4,798	7.4	382	7.3	5,731	7.6
Teacher									
Complete	M	9	.4	107	.3	9	.3	125	.3
Secondary	F	353	15.8	3,922	12.4	225	8.8	4,500	12.3
School -	T	362	8.2	4,029	6.2	234	4.5	4,625	6.1
Nursing									
Complete	M	472	21.4	4,899	14.6	512	19.0	5,883	15.3
Secondary	F	118	5.3	1,594	5.0	142	5.6	1,854	5.1
School -	T	590	13.3	6,493	10.0	654	12.5	7,737	10.4
Tech. Training									
Complete	M	397	18.0	5,318	15.8	341	12.6	6,056	15.7
Secondary	F	449	20.1	7,118	22.6	664	26.1	8,231	22.6
School - Job	T	846	19.0	12,436	19.1	1,005	19.1	14,287	19.1
Leave School	M	84	3.8	1,087	3.2	56	2.1	1,227	3.2
for Trade	F	54	2.4	602	1.9	57	2.2	713	2.0
Training	T	138	3.1	1,689	2.6	113	2.2	1,940	2.6
Leave School	M	126	5.7	1,333	4.0	85	3.2	1,544	4.0
for a Job	F	88	3.9	1,029	3.3	72	2.8	1,189	3.3
	T	214	4.8	2,362	3.6	157	2.9	2,733	3.7
Other Plans	M	465	21.1	9,253	27.6	686	25.4	10,404	27.0
or	F	492	22.1	8,134	25.7	635	24.9	9,261	25.5
Undecided	T	957	21.5	17,387	26.6	1,321	25.2	19,665	26.3
Total	M	2,208	100.0	33,562	100.0	2,700	100.0	38,470	100.0
	F	2,233	100.0	31,597	100.0	2,549	100.0	36,379	100.0
	T	4,441	100.0	65,159	100.0	5,249	100.0	74,849	100.0
No Answer	M	227	9.3	3,633	9.8	304	10.1	4,164	9.8
	F	182	7.5	3,027	8.7	278	9.8	3,487	8.7
	T	409	8.4	6,660	9.3	582	10.0	7,651	9.3
Final Total	M	2,435		37,195		3,004		42,634	
	F	2,415		34,624		2,827		39,866	
	T	4,850		71,819		5,831		82,500	

be concomitant with a greater interest evidenced by French language group students in vocational fields such as nursing, teaching, and technical training. English and Other language group students, on the other hand, indicated a stronger orientation than the French language group students towards university education following completion of secondary school.

SUMMARY

This chapter has centered on the relationship between school retention and certain socio-economic factors in terms of each of the three language groups. A strong relationship was found to exist between school retention and (1) the occupations of the students' fathers or guardians; (2) the size of the community in which the schools were located; (3) the extent of formal education of the parents of the students; and (4) the number of children in the families of the students. A smaller but still significant relationship was found to exist between school retention and the geographic location of the schools.

However, for most of the socio-economic breakdowns, the ratios of fifth-year enrolments and percentages of Honour Graduation Diplomas favoured the English and Other language groups over the French language group in the same relative proportions as did the Ontario totals. Thus, although there was evidence that the French language group maintained greater concentrations in socio-economic classifications that manifested comparatively low retention rates, this could not explain the higher school attrition rates for students in the French language group.

It appeared, however, that the retention differential among the three language groups might be to some extent a function of different value systems

manifested in student responses to questions regarding their future educational plans.

CHAPTER IV

APTITUDE AND ACHIEVEMENT TESTS

INTRODUCTION

The materials of this chapter focus on the relative performances of the three language groups on the Canadian Academic Aptitude Test (three sub-sections), the Canadian English Achievement Test (three sub-sections), and the Canadian Mathematics Achievement Test (three sub-sections). The mean scores and standard deviations are first compared in terms of the students who wrote the test battery in Grade 9, with specific reference to language groups; then scores for the students who remained in each of the first five years of the study are compared within each year across the three language groups.

The student population which originally wrote the tests was divided into quartiles on the basis of test performances. Each quartile does not contain exactly 25 per cent of the student population, because it was not possible to select score-cut points that made this exact discrimination. For example, to make the first quartile on CAAT II contain exactly 25 per cent of the students, only some of the students who scored 17 out of 25 would have been included. This of course was not feasible. Within each of the quartiles, retention rates of the three language groups are compared in order to determine to some extent the relation of aptitude and achievement factors to school retention.

APTITUDE AND ACHIEVEMENT TEST SCORES IN TERMS OF THE LANGUAGE GROUPS

Tables XCVI to CX present the mean scores and standard deviations on the nine aptitude and achievement tests with reference to the three language groups. Each table includes only those students who were enrolled in a specified year of the first five years of the study. For example, Table XCVIII includes all those students who wrote CAAT I, II, and III in the first year of the study and were still in attendance in the third year.

On CAAT I (Verbal Reasoning), II (Mathematical Reasoning), and III (Non-Verbal Reasoning) the English language group mean was higher than both the Other and French language group means. (Table XCVI). On CAAT I and II, the French language group mean was a full standard deviation below the English language group mean, while the differences between the English and Other language group means were very slight. The difference between the means for the English and French language groups was not quite as great on CAAT III and the Other language group performed as well as did the English language group. This might be explained by the nature of CAAT III which is essentially a non-verbal reasoning test, although one could not expect to discount entirely the amount of verbal facility required to interpret the test items.

CEAT I (Reading Comprehension), II (Mechanics of Expression), and III (Effectiveness of Expression) were expressly designed as English language achievement tests. Therefore it was somewhat surprising to find students from the Other language group scoring approximately the same as the English language group in terms of means and standard

deviations. However, at the same time it was found that the French language group scored nearly a full standard deviation below the other two language groups on CEAT I, II, and III (Tables CI to CV). The difference manifested between the French and Other language groups on the CEAT might possibly be associated with differences in pre-high school preparation, and/or home environment.

The English and Other language group means and standard deviations on CMAT I (Arithmetic Computation), II (Facts, Terms, and Concepts), and III (Measurement) were very similar, but again the French language group means were substantially lower, -- nearly a full standard deviation on CMAT II and III. Since on a series of tests oriented towards mathematics achievement, language should not have operated as a prominent factor, some other explanation of achievement differential should be possible. This explanation of course assumes similar composition of the three language groups in terms of intellectual potential. Thus it might be conceivable to explain the differential scores from the three language groups on CMAT I, II, and III in terms of motivational and pre-high school preparational factors (Tables CVI to CX).

If success in school is positively related to performance on tests of the type administered in this battery, it would be expected that as the years progressed, students who performed most effectively on the tests would be more likely to remain in school. Thus one might expect to find in the later years of the study that only those students who performed relatively well on the tests remained in school. However, the relative differences between the three language groups in terms of aptitude and achievement test scores seen above were maintained in the

latter years of secondary school enrolment.

Tables XIV to XXII present the numbers and percentages of students from each of the language groups scoring in each of the four quartiles on the aptitude and achievement tests. Whereas 14.0 per cent of the French language group scored in the first two quartiles on CAAT I (Verbal Reasoning), 53.6 per cent of the English language group, and 43.9 per cent of the Other language group scored in the first two quartiles (Table XIV). The comparative figures on CAAT II (Mathematical Reasoning) were English language group 51.4 per cent, Other language group 48.0 per cent, and the French language group 16.0 per cent; and for CAAT III (Non-Verbal Reasoning), English language group 49.6 per cent, Other language group 50.1 per cent, and the French language group 29.2 per cent (Tables XV and XVI).

On the Canadian English Achievement Test I (Reading Comprehension), II (Mechanics of Expression), and III (Effectiveness of Expression) the percentages of French language group scoring in the top two quartiles were 20.3 per cent, 19.9 per cent, and 23.5 per cent respectively, as opposed to 56.8, 51.5, and 55.1 per cent for the English language group, and 54.5, 54.4, and 49.1 per cent for the Other language group (Tables XVII to XIX). On the Canadian Mathematics Achievement Test I (Arithmetic Computation), II (Facts, Terms and Concepts), and III (Measurement) greater proportions of the French language group scored in the first and second quartile than on the other two test batteries (CMAT I, 34.9 per cent; CMAT II, 17.6 per cent; CMAT III, 28.9 per cent), but the English and Other language groups still performed more effectively (Tables XX to XXII).

TABLE XIV
SCORES BY QUARTILE - CAAT I

		French		English		Other		Total	
		N	%	N	%	N	%	N	%
First Quartile	M	89	4.1	9,813	28.0	568	20.1	10,470	26.1
	F	78	3.4	8,349	24.8	486	17.6	8,913	23.0
	T	167	3.7	18,162	26.4	1,054	18.9	19,383	24.6
Second Quartile	M	235	10.7	10,007	28.5	766	27.1	11,008	27.5
	F	228	9.8	8,720	25.8	633	22.9	9,581	24.7
	T	463	10.3	18,727	27.2	1,399	25.0	20,589	26.1
Third Quartile	M	490	22.4	9,091	25.9	783	27.7	10,364	25.9
	F	551	23.8	9,203	27.3	829	30.0	10,583	27.3
	T	1,041	23.1	18,294	26.6	1,612	28.8	20,947	26.5
Fourth Quartile	M	1,374	62.8	6,153	17.6	708	25.1	8,235	20.5
	F	1,458	63.0	7,437	22.1	815	29.5	9,710	25.0
	T	2,832	62.9	13,590	19.8	1,523	27.3	17,945	22.8
Total	M	2,188	100.0	35,064	100.0	2,825	100.0	40,077	100.0
	F	2,315	100.0	33,709	100.0	2,763	100.0	38,787	100.0
	T	4,503	100.0	68,773	100.0	5,588	100.0	78,864	100.0
No Answer	M	247	10.2	2,131	5.7	179	6.0	2,557	6.0
	F	100	4.1	915	2.6	64	2.3	1,079	2.7
	T	347	7.2	3,046	4.2	243	4.2	3,636	4.4
Final Total	M	2,435		37,195		3,004		42,634	
	F	2,415		34,624		2,827		39,866	
	T	4,850		71,819		5,831		82,500	

$$\chi^2 = 4973.50 (.001, 6 \text{ df})$$

TABLE XV
SCORES BY QUARTILE - CAAT II

		French		English		Other		Total	
		N	%	N	%	N	%	N	%
First Quartile	M	149	6.8	12,257	35.1	923	32.6	13,329	33.3
	F	77	3.4	7,282	21.6	533	19.3	7,892	20.3
	T	226	5.0	19,539	28.5	1,456	26.0	21,221	26.9
Second Quartile	M	293	13.3	8,245	23.5	623	22.0	9,161	22.9
	F	208	9.0	7,484	22.2	606	22.0	8,298	21.4
	T	501	11.0	15,729	22.9	1,229	22.0	17,459	22.2
Third Quartile	M	650	29.6	8,986	25.7	777	27.5	10,413	26.0
	F	577	24.9	10,252	30.4	800	28.9	11,629	30.0
	T	1,227	27.2	19,238	28.0	1,577	28.2	22,042	28.0
Fourth Quartile	M	1,103	50.3	5,476	15.7	507	17.9	7,086	17.8
	F	1,452	62.7	8,687	25.8	825	29.8	10,964	28.3
	T	2,555	56.7	14,163	20.6	1,332	23.8	18,050	22.9
Total	M	2,195	100.0	34,964	100.0	2,830	100.0	39,989	100.0
	F	2,314	100.0	33,705	100.0	2,764	100.0	38,783	100.0
	T	4,509	100.0	68,669	100.0	5,594	100.0	78,772	100.0
No Answer	M	240	9.8	2,231	6.0	174	5.8	2,645	6.2
	F	101	4.2	919	2.7	63	2.3	1,083	2.7
	T	341	7.0	3,150	4.4	237	4.1	3,728	4.5
Final Total	M	2,435		37,195		3,004		42,634	
	F	2,415		34,624		2,827		39,866	
	T	4,850		71,819		5,831		82,500	

$$\chi^2 = 3532.12 (.001, 6 \text{ df})$$

TABLE XVI
SCORES BY QUARTILE - CAAT III

		French		English		Other		Total	
		N	%	N	%	N	%	N	%
First Quartile	M	294	13.6	10,468	30.0	883	31.2	11,645	29.2
	F	258	11.2	8,491	25.3	744	26.9	9,493	24.5
	T	552	12.3	18,959	27.6	1,627	29.0	21,128	26.9
Second Quartile	M	372	17.1	7,649	22.0	611	21.6	8,632	21.6
	F	385	16.7	7,405	22.0	567	20.6	8,357	21.6
	T	757	16.9	15,054	22.0	1,178	21.1	16,989	21.7
Third Quartile	M	557	25.6	8,660	24.8	678	23.9	9,895	24.8
	F	624	27.0	9,196	27.4	736	26.6	10,556	27.3
	T	1,181	26.3	17,856	26.1	1,414	25.3	20,451	26.0
Fourth Quartile	M	950	43.7	8,109	23.2	658	23.3	9,717	24.4
	F	1,043	45.1	8,519	25.3	716	25.9	10,278	26.6
	T	1,993	44.5	16,628	24.3	1,374	24.6	19,995	25.4
Total	M	2,173	100.0	34,886	100.0	2,830	100.0	39,889	100.0
	F	2,310	100.0	33,611	100.0	2,763	100.0	38,684	100.0
	T	4,483	100.0	68,497	100.0	5,593	100.0	78,573	100.0
No Answer	M	262	10.8	2,309	6.2	174	5.8	2,745	6.4
	F	105	4.3	1,013	2.9	64	2.3	1,182	3.0
	T	367	7.6	3,322	4.6	238	4.1	3,927	4.7
Final Total	M	2,435		37,195		3,004		42,634	
	F	2,415		34,624		2,827		39,866	
	T	4,850		71,819		5,831		82,500	

$$\chi^2 = 1108.15 (.001, 6 \text{ df})$$

TABLE XVII
SCORES BY QUARTILE - CEAT I

		French		English		Other		Total	
		N	%	N	%	N	%	N	%
First Quartile	M	150	7.2	11,234	32.4	856	30.5	12,240	30.9
	F	120	5.3	9,641	28.9	714	26.1	10,475	27.3
	T	270	6.2	20,875	30.7	1,570	28.3	22,715	29.1
Second Quartile	M	305	14.7	9,180	26.5	743	26.5	10,228	25.9
	F	307	13.6	8,600	25.7	708	25.9	9,615	25.0
	T	612	14.1	17,780	26.1	1,451	26.2	19,843	25.5
Third Quartile	M	483	23.3	8,065	23.3	648	23.1	9,196	23.3
	F	582	25.8	8,295	24.8	657	24.1	9,534	24.8
	T	1,065	24.6	16,360	24.0	1,305	23.6	18,730	24.0
Fourth Quartile	M	1,139	54.8	6,168	17.8	558	19.9	7,865	19.9
	F	1,250	55.3	6,878	20.6	654	23.9	8,782	22.9
	T	2,389	55.1	13,046	19.2	1,212	21.9	16,647	21.4
Total	M	2,077	100.0	34,647	100.0	2,805	100.0	39,529	100.0
	F	2,259	100.0	33,414	100.0	2,733	100.0	38,406	100.0
	T	4,336	100.0	68,061	100.0	5,538	100.0	77,935	100.0
No Answer	M	358	14.7	2,548	6.9	199	6.6	3,105	7.3
	F	156	6.5	1,210	3.5	94	3.3	1,460	3.7
	T	514	10.6	3,758	5.2	293	5.0	4,565	5.5
Final Total	M	2,435		37,195		3,004		42,634	
	F	2,415		34,624		2,827		39,866	
	T	4,850		71,819		5,831		82,500	

$$\chi^2 = 3534.41 \text{ (.001, 6 df)}$$

TABLE XVIII
SCORES BY QUARTILE - CEAT II

		French		English		Other		Total	
		N	%	N	%	N	%	N	%
First Quartile	M	102	5.0	7,365	21.3	669	24.0	8,136	20.6
	F	199	8.8	10,782	32.4	922	33.7	11,903	31.1
	T	301	7.0	18,147	26.7	1,591	28.8	20,039	25.8
Second Quartile	M	203	9.8	8,253	23.9	694	24.8	9,150	23.3
	F	352	15.6	8,594	25.8	718	26.3	9,664	25.2
	T	555	12.9	16,847	24.8	1,412	25.6	18,814	24.2
Third Quartile	M	478	23.2	9,778	28.2	728	26.1	10,984	27.8
	F	619	27.5	8,127	24.4	643	23.5	9,389	24.5
	T	1,097	25.4	17,905	26.4	1,371	24.8	20,373	26.2
Fourth Quartile	M	1,278	62.0	9,196	26.6	700	25.1	11,174	28.3
	F	1,083	48.1	5,807	17.4	451	16.5	7,341	19.2
	T	2,361	54.7	15,003	22.1	1,151	20.8	18,515	23.8
Total	M	2,061	100.0	34,592	100.0	2,791	100.0	39,444	100.0
	F	2,253	100.0	33,310	100.0	2,734	100.0	38,297	100.0
	T	4,314	100.0	67,902	100.0	5,525	100.0	77,741	100.0
No Answer	M	374	15.4	2,603	7.0	213	7.1	3,190	7.5
	F	162	6.7	1,314	3.8	93	3.3	1,569	3.9
	T	535	11.1	3,917	5.5	306	55.2	4,759	5.8
Final Total	M	2,435		37,195		3,004		42,634	
	F	2,415		34,624		2,827		39,866	
	T	4,850		71,819		5,831		82,500	

$$\chi^2 = 2644.28 \text{ (.001, 6 df)}$$

TABLE XIX
SCORES BY QUARTILE - CEAT III

		French		English		Other		Total	
		N	%	N	%	N	%	N	%
First Quartile	M	108	5.3	9,679	28.0	619	22.1	10,406	26.4
	F	142	6.3	8,767	26.3	554	20.5	9,463	24.7
	T	250	5.8	18,446	27.2	1,173	21.3	19,869	25.6
Second Quartile	M	369	18.0	9,466	27.4	781	27.8	10,616	26.9
	F	394	17.5	9,496	28.5	753	27.8	10,643	27.8
	T	763	17.7	18,962	27.9	1,534	27.8	21,259	27.4
Third Quartile	M	429	20.9	7,025	20.4	639	22.8	8,093	20.6
	F	520	23.1	7,205	21.7	640	23.7	8,365	22.0
	T	949	22.1	14,230	21.0	1,279	23.2	16,458	21.2
Fourth Quartile	M	1,144	55.8	8,366	24.2	767	27.3	10,277	26.1
	F	1,196	53.1	7,816	23.5	758	28.0	9,770	25.5
	T	2,340	54.4	16,182	23.9	1,525	27.7	20,047	25.8
Total	M	2,050	100.0	34,536	100.0	2,806	100.0	39,392	100.0
	F	2,252	100.0	33,284	100.0	2,705	100.0	38,241	100.0
	T	4,302	100.0	67,820	100.0	5,511	100.0	77,633	100.0
No Answer	M	385	15.8	2,659	7.2	198	6.6	3,242	7.6
	F	163	6.7	1,340	3.9	122	4.3	1,625	4.1
	T	548	11.3	3,999	5.6	320	5.5	4,867	5.9
Final Total	M	2,435		37,195		3,004		42,634	
	F	2,415		34,624		2,827		39,866	
	T	4,850		71,819		5,831		82,500	

$$\chi^2 = 2402.75 \text{ (.001, 6 df)}$$

TABLE XX
SCORES BY QUARTILE - CMAT I

		French		English		Other		Total	
		N	%	N	%	N	%	N	%
First Quartile	M	207	10.1	6,147	17.8	642	23.0	6,996	17.8
	F	335	14.9	7,817	23.5	755	27.8	8,907	23.3
	T	542	12.6	13,964	20.7	1,397	25.3	15,903	20.6
Second Quartile	M	417	20.3	9,149	26.6	809	28.9	10,375	26.4
	F	546	24.2	9,694	29.2	782	28.8	11,022	28.9
	T	963	22.3	18,843	27.8	1,591	28.8	21,397	27.6
Third Quartile	M	591	28.7	9,761	28.3	748	26.7	11,100	28.2
	F	653	29.0	9,042	27.2	697	25.6	10,392	27.2
	T	1,244	28.9	18,803	27.8	1,445	26.2	21,492	27.7
Fourth Quartile	M	841	40.9	9,392	27.3	598	21.4	10,831	27.6
	F	719	31.9	6,669	20.1	485	17.8	7,873	20.6
	T	1,560	36.2	16,061	23.7	1,083	19.7	18,704	24.1
Total	M	2,056	100.0	34,449	100.0	2,797	100.0	39,302	100.0
	F	2,253	100.0	33,222	100.0	2,719	100.0	38,194	100.0
	T	4,309	100.0	67,671	100.0	5,516	100.0	77,496	100.0
No Answer	M	379	15.6	2,746	7.4	207	6.9	3,332	7.8
	F	162	6.7	1,402	4.1	108	3.8	1,672	4.2
	T	541	11.2	4,148	5.8	315	5.4	5,004	6.0
Final Total	M	2,435		37,195		3,004		42,634	
	F	2,415		34,624		2,827		39,866	
	T	4,850		71,819		5,831		82,500	

$$\chi^2 = 560.18 (.001, 6 \text{ df})$$

TABLE XXI
SCORES BY QUARTILE - CMAT II

		French		English		Other		Total	
		N	%	N	%	N	%	N	%
First Quartile	M	151	7.3	11,558	33.5	924	32.9	12,633	32.1
	F	90	4.0	7,361	22.1	528	19.5	7,979	20.9
	T	241	5.6	18,919	27.9	1,452	26.3	20,612	26.5
Second Quartile	M	271	13.2	10,126	29.3	776	27.7	11,173	28.4
	F	248	11.0	8,941	26.9	722	26.5	9,911	25.9
	T	519	12.0	19,067	28.1	1,498	27.1	21,084	27.2
Third Quartile	M	518	25.2	7,674	22.2	592	21.1	8,784	22.3
	F	525	23.3	8,878	26.7	735	27.0	10,138	26.5
	T	1,043	24.2	16,552	24.4	1,327	24.0	18,922	24.4
Fourth Quartile	M	1,116	54.3	5,162	15.0	512	18.3	6,790	17.2
	F	1,391	61.7	8,082	24.3	735	27.0	10,208	26.7
	T	2,507	58.2	13,244	19.6	1,247	22.6	16,998	21.9
Total	M	2,056	100.0	34,520	100.0	2,804	100.0	39,380	100.0
	F	2,254	100.0	33,262	100.0	2,720	100.0	38,236	100.0
	T	4,310	100.0	67,782	100.0	5,524	100.0	77,616	100.0
No Answer	M	379	15.5	2,675	7.2	200	6.7	3,254	7.6
	F	161	6.7	1,362	3.9	107	3.8	1,630	4.1
	T	540	11.1	4,037	5.6	307	5.3	4,884	5.9
Final Total	M	2,435		37,195		3,004		42,634	
	F	2,415		34,624		2,827		39,866	
	T	4,850		71,819		5,831		82,500	

$$\chi^2 = 3909.11 \text{ (.00\%, 6 df)}$$

TABLE XXII

SCORES BY QUARTILE - CMAT III

		French		English		Other		Total	
		N	%	N	%	N	%	N	%
First Quartile	M	221	10.8	10,051	29.2	916	32.7	11,188	28.5
	F	176	7.9	7,530	22.7	671	24.8	8,377	22.0
	T	397	9.3	17,581	26.0	1,587	28.8	19,565	25.3
Second Quartile	M	477	23.1	10,806	31.4	932	33.2	12,215	31.1
	F	366	16.4	9,035	27.2	748	27.5	10,149	26.6
	T	843	19.6	19,841	29.3	1,680	30.4	22,364	28.9
Third Quartile	M	474	23.0	7,444	21.6	530	18.9	8,448	21.5
	F	498	22.3	7,344	22.2	598	22.1	8,440	22.1
	T	972	22.6	14,788	21.9	1,128	20.5	16,888	21.8
Fourth Quartile	M	889	43.1	6,119	17.8	426	15.2	7,434	18.9
	F	1,194	53.4	9,272	27.9	694	25.6	11,160	29.3
	T	2,083	48.5	15,391	22.8	1,120	20.3	18,594	24.0
Total	M	2,061	100.0	34,430	100.0	2,804	100.0	39,285	100.0
	F	2,234	100.0	33,181	100.0	2,711	100.0	38,126	100.0
	T	4,295	100.0	67,601	100.0	5,515	100.0	77,411	100.0
No Answer	M	374	15.3	2,775	7.5	200	6.7	3,349	7.9
	F	181	7.5	1,443	4.2	116	4.1	1,740	4.4
	T	555	11.4	4,218	5.9	316	5.4	5,089	6.2
Final Total	M	2,435		37,195		3,004		42,634	
	F	2,415		34,624		2,827		39,866	
	T	4,850		71,819		5,831		82,500	

$$\chi^2 = 1768.37 (.001, 6 \text{ df})$$

The relatively poor performance of the French language group when compared with the English and Other language groups on the aptitude and achievement test battery might be assumed to be functionally related to the relatively high attrition rates manifested by students from the French language group.

The reason for the poorer performance of the French group however, is difficult to explain. While it might be possible to hypothesize that the performance differential is a function of a poorer elementary school preparation, or the difficulties associated with maintaining two languages, or a different value system, the data has yielded no direct evidence of any such causal factors.

ACHIEVEMENT AND APTITUDE TEST SCORES, AND RETENTION DIFFERENCES

The student population was divided into quartiles on the basis of performance on each of the aptitude and achievement tests. The relationship between test performances by quartile and school attrition rates is considered, and retention rates are examined within each quartile in terms of the three language groups.

An examination of Tables CXI to CXXII indicates the relative percentages of students in each of the four quartiles on CAAT I, II, and III still enrolled in secondary school in the fifth year of the study. Students who scored in the first quartile on CAAT I, II, and III were those most likely to be enrolled in the fifth year (71.5 per cent, 68.7 per cent, and 62.7 per cent respectively). Students in the second quartile were less likely to be enrolled in the fifth year: 52.8 per cent, 51.4 per cent, and 52.6 per cent of those students scoring in the

second quartile on CAAT I, II, and III respectively were still present in the fifth year of the study. By the fourth quartile, chances of fifth-year enrolment had dropped to about one out of four (22.0 per cent, 24.0 per cent, and 27.8 per cent).

For those students who scored in the first quartile on CAAT I, II, and III (Tables CXI to CXIII) there was considerable variation among the language groups in terms of retention. This might be explained by the different nature of the three sub-sections of the Canadian Academic Aptitude Test. For students scoring in the first quartile on CAAT I, II, and III the ratio of fifth-year enrolment favoured the English and Other language groups over the French language group by a margin of slightly less than two-to-one. The ratio of graduates from the English and Other language groups to graduates from the French language group ranged from two-to-one to three-to-one.

In the second quartile across CAAT I, II, and III (Tables CXIV to CXVI) the fifth-year enrolment for the English and Other language groups was quite consistent but there was considerable variation in enrolment in the French language group in terms of these tests (CAAT I, 38.6 per cent; CAAT II, 32.9 per cent; and CAAT III, 29.2 per cent). The fifth-year enrolment ratios between the English and Other language groups and the French language group were approximately five-to-three. There was also a substantial graduation differential among the language groups in terms of these tests. For example, on CAAT I and II, the difference between the ratios of graduates in the English and French language groups was comparatively small, although it still favoured the English language group, while on CAAT III, the ratio was four-to-one.

When the French and Other language groups were compared, the ratios favoured the Other language group by a margin of two-to-one or more.

The fifth-year enrolments among and within the language groups for students scoring in the third quartile on CAAT I, II, and III were similar and produced ratios of approximately three-to-one favouring the English and Other language groups over the French language group (Tables CXVII to CXIX). In terms of graduates, on CAAT I, the French language group had a greater percentage of graduates than the English language group but approximately half as many as the Other language group (French, - 4.9 per cent; English, - 3.7 per cent; Other, - 9.3 per cent). On CAAT II there was a slight difference between the English and Other language group in terms of percentage of graduates but this slight difference favoured the English language group. The ratios between the Other language and French language groups favoured the former by margins of from two-to-one to three-to-one.

There was a wide range of variance among and within the three language groups for students scoring within the fourth quartile on CAAT I, II, and III (Tables CXX to CXXII). Enrolments in the fifth year were only slightly less by proportion for the French language group than for the English language group although the Other language group had a slightly greater enrolment than the other two. Only a small percentage of students who scored in the fourth quartile on CAAT I, II, and III graduated after five years. The French language group percentage was slightly higher than that of the English language group on CAAT I but slightly lower on CAAT II and III. The percentage of graduates from the Other language group was comparatively small, but still two or three

times as great as for the other two language groups.

There was a direct relationship evidenced between the scores on CAAT I, II, and III and school retention. It could be assumed then that since a higher proportion of the French language group performed at the third and fourth quartile level, these tests operated as predictors of school success. If the English and Other language groups were reconstituted using the relative proportions of the French language group that appeared in each quartile on CAAT I, the English and Other language groups would have percentages of fifth-year graduates of 3.8 per cent and 6.0 per cent respectively, which compares with the percentage of 3.2 per cent for the French language group.

CEAT I, II, and III were also found to be accurate predictors of school success. An examination of Tables CXXIII to CXXXIV indicates the relative percentages of students scoring in the four quartiles of CEAT I, II, and III still enrolled in the fifth year. Again it is quite clear that school retention was closely related to performance on this test. Whereas 66.5 per cent, 68.9 per cent, and 69.2 per cent respectively of those students scoring in the first quartile on CEAT I, II, and III were still enrolled in the fifth year, 26.7 per cent, 26.0 per cent, and 26.8 per cent of students scoring in the fourth quartile were enrolled in the fifth year of the study.

Yearly retention rates in terms of quartile scores on CEAT I, II, and III are presented in Tables CXXIII to CXXXIV. The differences among the three language groups in terms of percentages of fifth-year enrolments and graduates relative to these scores were quite substantial.

The percentage enrolments in the fifth year were similar for the three CEAT sub-tests within the three language groups for those students classified in the first quartile (Tables CXXIII to CXXV). The percentage of graduates within the three language groups was approximately the same for all three Canadian English Achievement Tests except for the relatively low percentage of success demonstrated by the French language group on CEAT I. Generally, the ratio of English and Other language group enrolment to French language group enrolment in the fifth year was three-to-two, but the ratio of graduates again favoured the English and Other language groups by margins ranging from two-to-one to three-to-one in terms of percentage of graduates.

The overall success picture in terms of fifth-year enrolment and numbers of graduates was considerably reduced in all language groups for those students who scored in the third quartiles on CEAT I, II, and III (Tables CXXIX to CXXXI). The fifth-year percentage enrolment was similar for English and Other language groups on CEAT I, II, and III but varied over a range of 5.6 per cent for the French language groups (CEAT I, - 24.4 per cent; CEAT II, - 30.0 per cent; CEAT III, - 27.5 per cent). There was very little difference within the three language groups in terms of the percentage of graduates except for the lower proportions of Other language group graduates on CEAT II. The ratios of fifth-year enrolment favoured the English and Other language groups by a narrow margin within the third quartile of CEAT I, II, and III (less than three-to-two). The proportion of graduates differed only slightly between the English and French language group (a ratio of five-to-four in favour of the English language group), but the Other language group

retained a ratio of approximately two-to-one over the French language group.

With regard to the fourth quartiles of CEAT I, II, and III, only slight variance was evidenced in fifth-year enrolments within the language groups (Tables CXXXII to CXXXIV). The ratio of fifth-year enrolments through the three language groups favoured the English and Other language groups over the French language group by a three-to-one margin on CEAT II and III, but the margin favouring the English language group was less on CEAT I, although the ratio favouring the Other language group over the French language group remained three-to-two on CEAT I. The percentage of graduates after five years from all groups was quite small and correspondingly, differences between the English and French language groups were quite small. However, the Other language group was relatively successful in terms of percentage of graduates.

If the English language group were reconstituted in the same proportions that were assigned to the four quartiles in the French language group on CEAT II, the percentage of graduates would be 5.8 per cent. The corresponding figure for the Other language group would be 7.8 per cent. It would appear that low achievement as measured by scores on CEAT I, II, and III was directly related to lower retention rates in secondary school. The relatively poor performance on this test battery by the French language group could be assumed to be symptomatic of a condition associated with high secondary school attrition rates.

The percentages of fifth-year retention by quartile presented in Tables CXXV to CXLVI indicate that CEAT I, II, and III were also closely

associated with secondary school retention. Whereas 62.7 per cent, 71.6 per cent, and 68.2 per cent respectively of those students scoring in the first quartile on CMAT I, II, and III were still enrolled in the fifth year of the study, 32.0 per cent, 21.6 per cent, and 25.4 per cent of students scoring in the fourth quartile were still enrolled in the fifth year of the study.

Yearly retention rates by quartile scores on the Canadian Mathematics Achievements Test I, II, and III in terms of the three language groups are presented in Tables CXXXV to CXLVI. The greatest variance within the language groups for students who scored in the first quartile on CMAT I, II, and III in terms of fifth-year enrolment occurred on CMAT II for the English and French language group students (Tables CXXXV to CXXXVII). In fact, retention rates were generally higher for students who scored in the first quartile on CMAT II than for those who scored in the first quartile on CMAT I and III. The ratio of the English and Other language groups to the French language group in terms of fifth-year enrolment ranged between two-to-one and seven-to-four. The ratios of graduates again favoured the English and Other language groups by margins ranging from three-to-one to two-to-one.

There was very little variation in terms of fifth-year enrolment within the language groups for students scoring in the second quartile on CMAT I, II, and III. The French language group manifested the greatest variation (CMAT I, - 27.2 per cent; CMAT II, - 35.0 per cent; CMAT III, - 31.3 per cent). The ratios of fifth-year enrolment again favoured the English and Other language groups by margins

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ranging from two-to-one and three-to-one. The ratios of graduates in the third quartile of CMAT I and II favoured the English and Other language groups by margins ranging from two-to-one to three-to-one. Although the English language group produced only a slightly higher percentage of graduates than the French language group on CMAT II, the ratio of Other language group to French language group favoured the Other language group by a margin of more than two-to-one.

Students in the English and Other language groups scoring in the third quartile were again favoured over the French language group in terms of the ratio of fifth-year enrolment by margins ranging from two-to-one to three-to-two. The ratios of English and Other language group graduates to French language group graduates ranged from about two-to-one to three-to-one except for the English and French language group on CMAT II where the percentages of graduates were approximately the same (French, - 4.0 per cent; English, - 3.8 per cent).

The greatest variation in the fifth-year enrolments for students scoring in the fourth quartile on CMAT I, II, and III occurred on CMAT II for the English and Other language groups where the percentage was slightly lower than for CMAT I and III (Tables CXLIV to CXLVI). Differences between the English and French language groups were very slight in terms of percentages of graduates while the Other language group had a slightly greater proportion of graduates. As was to be expected, the number of graduates from students scoring in the fourth quartile on the three subtests was very low.

It should be noted that CMAT II operated as the most effective

prediction test of the three mathematics aptitude tests in terms of fifth-year enrolment.

SUMMARY

This chapter was concerned with the performance of students from the three language groups on the nine sub-tests of the Canadian Academic Aptitude Test, the Canadian English Achievement Test, and the Canadian Mathematics Achievement test. School retention rates were analyzed for the three language groups within each quartile of the sub-tests.

Students from the French language group performed generally at a much lower level than students from the English and Other language groups in all of the sub-tests. The English language group performed at a slightly higher level than the Other language group. Differences between the English and Other language groups and the French language group were more substantial on the type of test requiring English verbal facility and less substantial but still pronounced on tests requiring non-verbal reasoning or mathematical ability.

As was to be expected, a strong relationship was demonstrated between scores on these tests and school retention. The retention differences between the language groups were far less within each of the quartiles than the differences obtained for the total population within each language group, but they were still present and substantial within most of the quartiles of the sub-tests. Differences among the language groups were less for students scoring in the lower two quartiles; in some cases the French language group was slightly favoured. If the

English and Other language groups were reconstituted using the same proportions by quartile achieved by the French language group on the sub-tests, the retention rates and proportions of graduates would become very similar.

Thus it would appear that the comparatively poor performance of students from the French language group on aptitude and achievement tests was associated with their lack of success in secondary school, and their high attrition rates.

CHAPTER V

SECONDARY FACTORS

INTRODUCTION

This chapter is concerned with materials which might be classified as secondary sources of data on the student population: (a) age at entry into secondary school; (b) number of transfers from school to school; (c) effect of Grade 9 repetition on school retention; (d) ratings of students by their teachers on reliability, cooperation, industry, physical stamina and energy, and chances of completing Grade 13 successfully.

Although not all the sub-classifications in each area are analyzed in terms of yearly retention, those which manifested substantial differences among the language groups are discussed.

AGE

The year of birth of the students was obtained from Item No. 3 of the Grade 9 Student Questionnaire and is summarized by language groups in Table XXIII. Although students from families recently immigrated were often held back in school because of language adjustments and a common policy of retarding these students by one grade relative to their age, age of entry into high school can be used as rough measure of elementary school retardation. Whereas 34.3 per cent of the English language group students were born in 1944 or before, 44.6 per cent of the French language group students and 47.8 per cent of the Other language group students were born in 1944 or before. These figures indicate a greater degree of school retardation for the French and Other language groups and a lesser degree

TABLE XXIII
YEAR OF BIRTH OF STUDENTS BY LANGUAGE GROUPS

	French		English		Other		Total	
	N	%	N	%	N	%	N	%
1941 or Before	19	.4	201	.3	64	1.1	284	.3
1942	135	2.8	1,343	1.9	198	3.5	1,676	2.1
1943	503	10.5	5,721	8.0	699	12.0	6,923	8.4
1944	1,299	26.9	17,250	24.1	1,812	31.3	20,361	24.8
1945	2,021	41.9	33,037	46.2	2,244	38.6	37,302	45.4
1946	731	15.1	13,188	18.4	744	12.8	14,663	17.8
1947	113	2.3	788	1.1	42	.7	943	1.2
1948	6	.1	25	.0	2	.0	33	.0
1949 or After	2	.0	13	.0	2	.0	17	.0
Total	4,829	100.0	71,566	100.0	5,807	100.0	82,202	100.0
No Answer	21	.4	253	.4	24	.4	298	.4
Final Total	4,850		71,819		5,831		82,500	

$$\chi^2 = 706.76 (.001, 16 \text{ df})$$

of retardation for the English language group. It was also apparent that a correspondingly greater percentage of the English language group students were accelerated in elementary school (born 1946 or after: English, - 19.5 per cent; French, - 17.5 per cent; and Other, - 13.5 per cent).

For those students born in 1943 or before, fifth-year percentage enrolments and percentages of graduates were similar for the French and English language groups but were far greater for the Other language group (Table CXLVII). Retention rates and percentages of graduates were generally low for all the students born in 1944, but the Other language group manifested substantially greater percentages than the French and English language groups (fifth-year enrolment: French, - 13.5 per cent; English, - 22.3 per cent; and Other, - 35.0 per cent. Graduates: French, - 0.5 per cent; English, - 1.4 per cent; and Other, - 8.7 per cent. See Table CXLVIII). This data suggests that the relatively high degree of elementary school retardation demonstrated by the Other language group was probably due to the difficulty of language adjustment, and arbitrary retardation.

The figures in Table CXLIX (students born in 1945) approximate the general retention figures obtained for the total student population in each language group, while Table CL (students born in 1946 or later) presents a similar pattern but with slightly greater percentages of enrollees throughout and substantially more graduates.

There was a strong relationship demonstrated between age and school retention (more so for the English and French language groups than for the Other language group) with younger students tending to stay in

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school longer. Within each age classification, except students born in 1943 or before, the percentages of fifth-year enrolment and graduates were in similar proportions to those obtained for the total population in each language group.

SCHOOL TRANSFERS

Since the longer a student stays in school, the greater his opportunity to transfer to other schools, one would expect that the French language group would be more likely to spend their secondary school careers in one school. This theory can be supported by the data presented in Table XXIV. Whereas the English and Other language groups were similarly represented in each of the "Number of schools attended" classifications, the French language group contained more students by proportion who remained in one school, and correspondingly fewer in the other classifications.

As would be expected, fifth-year enrolment was higher in all three language groups for students who enrolled in more than two schools, (Tables CLIII, CLIV, and CLV). The percentages of students who received Honour Graduation Diplomas after five years in each of the transfer categories were similar to the total percentages obtained for each language group, (Tables CLI to CLV).

GRADE 9 REPETITION

Information relating to whether a student was repeating Grade 9 in 1959 was obtained from Item No. 2 of the Grade 9 Staff Questionnaire. Whereas 7.2 per cent of the Other language group and 9.0 per cent of the French language group were indicated by the teachers to be Grade 9 repeaters, 14.5 per cent of the English language group were classified as Grade 9 repeaters.

TABLE XXIV

NUMBER OF SCHOOLS ATTENDED BY LANGUAGE GROUPS

		French		English		Other		Total	
		N	%	N	%	N	%	N	%
One School	M	1,898	78.0	25,291	68.0	2,037	67.8	29,226	68.6
	F	1,783	73.8	24,693	71.3	2,031	71.8	28,507	71.5
	T	3,681	75.9	49,984	69.6	4,068	69.8	57,733	70.0
Two Schools	M	446	18.3	9,443	25.4	769	25.6	10,658	25.0
	F	532	22.0	8,183	23.6	670	23.7	9,385	23.5
	T	978	20.1	17,626	24.5	1,439	24.7	20,043	24.3
Three Schools	M	78	3.2	2,120	5.7	162	5.4	2,360	5.5
	F	91	3.8	1,532	4.4	112	4.0	1,735	4.4
	T	169	3.5	3,652	5.1	274	4.7	4,095	4.9
Four Schools	M	13	.5	303	.8	32	1.1	348	.8
	F	9	.4	195	.6	13	.5	217	.5
	T	22	.5	498	.7	45	.8	565	.7
Five Schools	M		.0	32	.1	4	.1	36	.1
	F		.0	20	.1	1	.0	21	.1
	T			52	.1	5	.0	57	.1
Six Schools	M		.0	5	.0		.0	5	.0
	F		.0	1			.0	1	.0
	T			6	.0			6	.0
Seven Schools	M		.0	1	.0		.0	1	.0
	F		.0				.0		
	T			1	.0			1	.0
Total	M	2,435		37,195		3,004		42,634	
	F	2,415		34,624		2,827		39,866	
	T	4,850		71,819		5,831		82,500	

$$\chi^2 = 95.60 (.001, 12 \text{ df})$$

T A B L E XXV

YEARLY RETENTION RATES IN TERMS OF GRADE 9 REPETITION

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	M	313	100.0	216	69.0	136	43.5	78	24.9	43	13.7	.0
	F	170	100.0	90	52.9	39	22.9	24	14.1	9	5.3	.0
	T	483	100.0	306	61.0	175	33.2	102	19.5	52	9.5	.0
English	M	5,722	100.0	4,475	78.2	3,201	55.9	2,301	40.2	1,347	23.5	.8
	F	3,966	100.0	2,830	71.4	1,566	39.5	932	23.5	394	9.9	.5
	T	9,688	100.0	7,305	74.8	4,767	47.7	3,233	31.9	1,741	16.7	.7
Other	M	224	100.0	176	78.6	141	62.9	111	49.6	67	29.9	.9
	F	171	100.0	128	74.9	67	39.2	40	23.4	17	9.9	1.2
	T	395	100.0	304	76.8	208	51.1	151	36.5	84	19.9	1.1
Total	M	6,259	100.0	4,867	77.8	3,478	55.6	2,490	39.8	1,457	23.3	.8
	F	4,307	100.0	3,048	70.8	1,672	38.8	996	23.1	420	9.8	.5
	T	10,566	100.0	7,915	74.9	5,150	48.7	3,486	33.0	1,877	17.8	.6

$$\chi^2 (5th Year) = 16.27 (.001)$$

$$\chi^2 (Grads.) = 3.99 (.25)$$

Yearly retention rates for Grade 9 repeaters in each of the three language groups are summarized in Table XXV. The English and Other language groups had approximately twice as many repeaters enrolled in the fifth year as did the French language group. None of the French language group repeaters graduated with Honour Graduation Diplomas after five years, but a very small percentage of the English and Other language group repeaters were successful on the Grade 13 examinations (0.7 per cent and 1.1 per cent respectively).

Rather than noting differences among the language groups, this data served to illustrate the relatively low school retention rates for all students who repeated Grade 9.

STAFF RATINGS OF STUDENTS

A rating of each student on five personal factors by his teachers was reported as a response to Item No. 1 of the Grade 9 Staff Questionnaire. The responses to Item No. 1 (i) - "Reliability as indicated by performance of curricular and extra-curricular duties" - are summarized in Table XXVI. While 44.8 per cent of the Other language group students received "Above Average" ratings, 35.3 per cent of the English language group and 26.0 per cent of the French language group were so rated. Correspondingly, the French language group received greater proportions of "Average" and "Below Average" ratings. The differences among the language groups were significant and favoured the Other language group over the English language group, and the latter over the French language group.

Yearly retention rates for the three language groups in terms of the five "Reliability" classifications are presented in Tables CLVI to CLX. Within each of the sub-classifications, the English and Other lan-

TABLE XXVI

STAFF QUESTIONNAIRE - RELIABILITY RATING BY LANGUAGE GROUPS

	French		English		Other		Total	
	N	%	N	%	N	%	N	%
Much Below Average	176	3.9	2,682	3.9	139	2.4	2,997	3.8
Below Average	955	21.4	12,087	17.6	739	13.2	13,781	17.5
Average	2,170	48.7	29,712	43.2	2,216	39.6	34,098	43.2
Above Average	912	20.5	18,276	26.5	1,824	32.6	21,012	26.6
Much Above Average	243	5.5	6,087	8.8	685	12.2	7,015	8.9
Total	4,456	100.0	68,844	100.0	5,603	100.0	78,903	100.0
No Answer	394	8.1	2,975	4.1	228	3.9	3,597	4.4
Final Total	4,850		71,819		5,831		82,500	

$$\chi^2 = 442.26 (.001, 8 \text{ df})$$

guage groups maintained greater percentages of fifth-year enrolment and graduates than the French language group.

The responses to Item No. I (ii) - "Cooperation with teachers and students" - are summarized in Table XXVII. The French language group again received the smallest proportion of "Above Average" ratings (31.8 per cent), the Other group the greatest (49.2 per cent), and the English language group ranked between these two (40.9 per cent). Correspondingly, the reverse was true for the "Below Average" classifications.

Yearly retention rates for the three language groups in terms of each of the five "Cooperation" classifications are summarized in Tables CLXI to CLXV. Retention rates were found to be strongly related to "Cooperation" ratings, the students receiving the highest ratings remaining in school longest. Percentages of fifth-year enrolment favoured the English and Other language group students over the French language group students, but because of the small number of graduates in the "Below Average" and "Much Below Average" sub-classifications, differences among the language groups within these classifications were not pronounced.

The responses to Item No. I (iii) - "Industry in school work" - are summarized in Table XXVIII. The French language group students once more received more "Average" or "Below Average" ratings by proportion (72.3 per cent), and the Other language group students the least (54.7 per cent), with the English language group falling between the two (66.6 per cent).

There was a strong relationship evidenced between "Industry" as estimated by the teachers and school retention (Tables CLXVI to CLXX)

TABLE XXVII

STAFF QUESTIONNAIRE - CO-OPERATION RATING BY LANGUAGE GROUPS

		French		English		Other		Total	
		N	%	N	%	N	%	N	%
Much Below Average	M	76	3.4	1,206	3.4	54	1.9	1,336	3.3
	F	30	1.3	508	1.6	32	1.2	570	1.5
	T	106	2.4	1,714	2.5	86	1.5	1,906	2.5
Below Average	M	422	19.1	5,201	14.6	307	10.6	5,930	14.6
	F	241	10.7	3,045	9.1	195	7.2	3,481	9.1
	T	663	14.9	8,246	12.0	502	9.0	9,411	11.9
Average	M	1,119	50.8	16,365	46.1	1,193	41.3	18,677	46.0
	F	1,148	51.0	14,410	43.2	1,065	39.2	16,623	43.4
	T	2,267	50.9	30,775	44.6	2,258	40.3	35,300	44.7
Above Average	M	451	20.5	9,860	27.7	984	34.0	11,295	27.8
	F	632	28.1	11,275	33.8	980	36.1	12,887	33.6
	T	1,083	24.3	21,135	30.7	1,964	35.0	25,182	30.6
Much Above Average	M	136	6.2	2,901	8.2	354	12.2	3,391	8.3
	F	200	8.9	4,095	12.3	441	16.3	4,736	12.4
	T	336	7.5	6,996	10.2	795	14.2	8,127	10.3
Total	M	2,204	100.0	35,533	100.0	2,892	100.0	40,629	100.0
	F	2,251	100.0	33,333	100.0	2,713	100.0	38,297	100.0
	T	4,455	100.0	58,866	100.0	5,605	100.0	78,926	100.0
No Answer	M	231	9.4	1,662	4.5	112	3.7	2,005	4.7
	F	164	6.8	1,291	3.7	114	4.0	1,569	3.9
	T	395	8.1	2,953	4.1	226	3.9	3,574	4.3
Final Total	M	2,435		37,195		3,004		42,634	
	F	2,415		34,624		2,827		39,866	
	T	4,850		71,819		5,831		82,500	

$$\chi^2 = 1855.60 (.001, 8 \text{ df})$$

TABLE XXVIII

STAFF QUESTIONNAIRE - INDUSTRY RATING BY LANGUAGE GROUPS

		French		English		Other		Total	
		N	%	N	%	N	%	N	%
Much Below Average	M	138	6.3	2,308	6.5	101	3.5	2,547	6.3
	F	68	3.0	975	2.9	52	1.9	1,095	2.9
	T	206	4.6	3,283	4.8	153	2.7	3,642	4.6
Below Average	M	618	28.0	8,653	24.4	508	17.6	9,779	24.0
	F	410	18.2	5,429	16.3	327	12.1	6,166	16.1
	T	1,028	23.0	14,082	20.5	835	15.0	15,945	20.2
Average	M	945	42.9	14,736	41.4	1,102	38.1	16,783	41.3
	F	1,044	46.4	13,726	41.2	977	36.0	15,747	41.1
	T	1,989	44.7	28,462	41.3	2,079	37.0	32,530	41.2
Above Average	M	375	17.0	7,554	21.3	871	30.1	8,800	21.7
	F	559	24.9	9,553	28.7	910	33.5	11,022	28.8
	T	934	21.0	17,107	24.8	1,781	31.8	19,822	25.1
Much Above Average	M	128	5.8	2,275	6.4	310	10.7	2,713	6.7
	F	169	7.5	3,645	10.9	447	16.5	4,261	11.1
	T	297	6.7	5,920	8.6	757	13.5	6,974	8.9
Total	M	2,204	100.0	35,526	100.0	2,892	100.0	40,622	100.0
	F	2,250	100.0	33,328	100.0	2,713	100.0	38,291	100.0
	T	4,454	100.0	68,854	100.0	5,605	100.0	78,913	100.0
No Answer	M	231	9.5	1,669	4.5	112	3.7	2,012	4.7
	F	165	6.8	1,296	3.7	114	4.0	1,575	3.9
	T	396	8.2	2,965	4.1	226	3.9	3,587	4.3
Final Total	M	2,435		37,195		3,004		42,634	
	F	2,415		34,624		2,827		39,866	
	T	4,850		71,819		5,831		82,500	

$$\chi^2 = 478.91 (.001, 8 \text{ df})$$

with the students who received the highest ratings tending to stay in school longer. The English and Other language groups, in terms of "Industry" ratings, retained greater proportions of students enrolled in the fifth year, and had more students receive Honour Graduation Diplomas than the French language group, within each of the sub-classifications.

The responses to Item No. 1 (iv) - "Physical stamina and energy" - are presented in Table XXIX. Generally, students received more "Average" and "Above Average" ratings for this category than for the other four. The differences among the groups were still quite apparent. Whereas 22.9 per cent of the French language group received ratings in the "Above Average" and "Much Above Average" sub-classifications, 27.5 per cent of the English language group and 33.8 per cent of the Other language group received ratings in these sub-classifications.

The relationship between the "Energy" rating and school retention was not as pronounced as that evidenced for the "Cooperation", "Reliability", and "Industry" classifications but was still substantial (Tables CLXXI to CLXXV). Again the English and Other language groups retained greater proportions of students who were enrolled in the fifth year and who graduated after five years, than the French language group in each sub-classification.

Throughout the first four teacher-rating classifications ("Reliability", "Cooperation", "Industry", and "Energy") the French language group received more ratings than the other two language groups in the "Average" sub-classifications.

The responses to Item No. 1 (v) - "Students' chances of completing

TABLE XXIX

STAFF QUESTIONNAIRE - ENERGY RATING BY LANGUAGE GROUPS

		French		English		Other		Total	
		N	%	N	%	N	%	N	%
Much below average	M	63	2.9	861	2.4	31	1.1	955	2.4
	F	43	1.9	690	2.1	30	1.1	763	3.5
	T	106	2.4	1,551	2.3	61	1.1	1,718	2.8
Below average	M	387	17.6	5,073	14.3	272	9.4	5,732	14.1
	F	343	15.3	4,814	14.5	290	10.7	5,447	25.1
	T	730	16.4	9,887	14.4	562	10.0	11,179	18.0
Average	M	1,245	56.5	19,934	56.2	1,577	54.7	22,756	56.1
	F	1,353	60.1	18,396	55.3	1,501	55.5	21,250	21.9
	T	2,598	58.3	38,330	55.8	3,078	55.1	44,006	44.2
Above average	M	400	18.1	7,768	21.9	797	27.7	8,965	22.1
	F	398	17.7	7,504	22.6	708	26.2	8,610	39.7
	T	798	17.9	15,272	22.2	1,505	27.0	17,575	28.2
Much above average	M	108	4.9	1,821	5.2	204	7.1	2,133	5.3
	F	113	5.0	1,836	5.5	1,174	6.5	2,123	9.8
	T	221	5.0	3,657	5.3	378	6.8	4,256	6.8
Total	M	2,203	100.0	35,457	100.0	2,881	100.0	40,541	100.0
	F	2,250	100.0	33,240	100.0	2,703	100.0	38,193	100.0
	T	4,453	100.0	68,697	100.0	5,584	100.0	78,734	100.0
No Answer	M	232	9.5	1,738	4.7	123	4.1	2,093	4.9
	F	165	6.8	1,384	4.0	124	4.4	1,673	4.2
	T	397	8.2	3,122	4.3	247	4.2	3,766	4.6
Final Total	M	2,435		37,195		3,004		42,634	
	F	2,415		34,624		2,827		39,866	
	T	4,850		71,819		5,831		82,500	

$$\chi^2 = 236.84 (.001, 8 \text{ df})$$

Grade 13 successfully" - are summarized in Table XXX. Whereas 14.2 per cent of the French language group students received "Above Average" ratings, 20.3 per cent of the English language group, and 25.5 per cent of the Other language group received "Above Average" ratings in this category. Correspondingly, the French language group received a greater percentage of "Below Average" ratings.

As might have been expected, retention rates were found to be closely related to the teachers' assessments of the students' chances of Grade 13 success (Tables CLXXVI to CLXXX). The percentage of graduates was extremely low in the "Much Below Average" sub-classification for all three language groups, but the ratios of fifth-year enrolment still favoured the English and Other language groups over the French language group by a margin of approximately two-to-one (Table CLXXVI). The two-to-one ratio favouring the English and Other language groups was maintained throughout the other four sub-classifications. The ratio of English and Other language group graduates to French language group graduates ranged from two-to-one to four-to-one through these sub-classifications. Of the French language group students who received "Much Above Average" ratings, 16.4 per cent received Honour Graduation Diplomas after five years, as opposed to 64.1 per cent of the English language group, and 61.9 per cent of the Other language group (Table CLXXX). It might be concluded from this that French language group students are not influenced by high expectations of their teachers.

SUMMARY

This chapter focused on materials indirectly related to the specific orientation of this investigation. More light was shed on the

TABLE XXX

STAFF QUESTIONNAIRE - TEACHERS' ESTIMATES OF STUDENTS' CHANCES FOR GRADE 13 SUCCESS
BY LANGUAGE GROUPS

		French		English		Other		Total	
		N	%	N	%	N	%	N	%
Much Below Average	M	778	35.3	9,645	27.2	575	20.0	10,998	27.2
	F	531	23.7	7,756	23.5	565	21.0	8,852	23.3
	T	1,309	29.4	17,401	25.4	1,140	20.5	19,850	25.3
Below Average	M	666	30.2	10,350	29.2	721	25.0	11,737	29.0
	F	634	28.2	9,389	28.4	677	25.2	10,700	28.2
	T	1,300	29.2	19,739	28.8	1,398	25.1	22,437	28.6
Average	M	491	22.3	8,929	25.2	842	29.2	10,262	25.3
	F	719	32.0	8,493	25.6	768	28.5	9,980	26.3
	T	1,210	27.2	17,422	25.5	1,610	28.9	20,242	25.8
Above Average	M	213	9.7	4,720	13.4	568	19.7	5,501	13.6
	F	275	12.2	5,148	15.6	467	17.4	5,890	15.5
	T	488	11.0	9,868	14.4	1,035	18.6	11,391	14.5
Much Above Average	M	55	2.5	1,769	5.0	176	6.1	2,000	4.9
	F	86	3.9	2,265	6.9	212	7.9	2,563	6.7
	T	141	3.2	4,034	5.9	388	6.9	4,563	5.8
Total	M	2,203	100.0	35,413	100.0	2,882	100.0	40,498	100.0
	F	2,245	100.0	33,051	100.0	2,689	100.0	37,985	100.0
	T	4,448	100.0	68,464	100.0	5,571	100.0	78,483	100.0
No Answer	M	232	9.5	1,782	4.8	122	4.1	2,136	5.0
	F	170	7.0	1,573	4.5	138	4.9	1,881	4.7
	T	402	8.3	3,355	4.7	260	4.5	4,017	4.9
Final Total	M	2,435		37,195		3,004		42,634	
	F	2,415		34,624		2,827		39,866	
	T	4,850		71,819		5,831		82,500	

$$\chi^2 = 304.41 \text{ (.001, 8 df)}$$

singular nature of each of the three language groups. The English language group was younger on the average than the other two language groups, and contained a greater proportion of elementary school accelerates, as well as a smaller proportion of students retarded in elementary school.

The French language group students transferred from school to school less than students in the other two groups. It was felt that this might be accounted for by the fact that the French students did not remain in school as long as students in the other groups. The proportion of Grade 9 repeaters in the original 1959 population appeared to be highest for the English language group, and lowest for the Other language group. It should be noted that this item on the Staff Questionnaire was not well answered by the teachers.

On teacher ratings of personal factors "Reliability", "Cooperation", "Industry", and "Stamina and Energy" the French language group students received more "Average" and "Below Average" ratings and fewer "Above Average" ratings from their teachers than the English and Other language group students. High retention rates were generally associated with high ratings on these factors: therefore, as would be expected, retention rates in each of the sub-classifications favoured the English and Other language groups over the French language group. Fewer students by proportion in the French language group than those in the English and Other language groups were rated as having an "Above Average" chance of completing Grade 13 successfully. Within each teacher rating sub-classification for this factor, the French language group maintained substantially higher attrition rates than the English and Other language groups.

CHAPTER VI

MULTI-VARIATE ANALYSIS

INTRODUCTION

This chapter has been set up with two major purposes in mind. The first is to evaluate the relationships between the variables associated with school retention for each of the three language groups. To this end, the magnitudes of the correlations obtained for each language group are examined and differences between correlations in terms of the groups are considered. The original correlation matrix involved over seventy variables, but since many of the variables were inapplicable, the matrix was reduced to fifty-one variables in order to facilitate presentation.

The second purpose of the chapter is to interpret the results of the multiple discriminant analysis. The main concern was with noting changes over the five years in the discriminant weights obtained for each of the variables: first for the three language groups combined, and secondly for pairings involving the English and French language groups, and the French and Other language groups. The relative size of each of the discriminant weights was also considered, as changes in the weights assigned to each variable as a discriminant through the five years of the study might suggest a reduction or an increase in the discriminating power of that variable. If it was found that the discriminant weight of a variable was appreciably reduced through the five years of investiga-

tion, it might be conceivable to suggest that the students who left school were students who when in attendance, provided the characteristics of more refined discrimination between the groups on the basis of that particular variable in terms of its relationship with the other variables.

The materials of this chapter are somewhat lengthy and far too complex and unwieldy for concise presentation. It was not possible to completely develop all the major aspects associated with each tabular presentation. Thus, the selection of pertinent factors was necessarily arbitrary.

THE CORRELATION MATRIX

Since a correlation matrix involving fifty-one variables tends to be somewhat large for facility of presentation and assimilation, selected correlations are presented in tabular form. Tables CLXXXII and CLXXXIII present the number of students employed in the determination of the correlations involving the three language groups for each of the fifty-one variables selected for analysis. The purpose of this table is to allow the reader the opportunity to visually compare the differences in correlations between the language groups and at the same time to note differences in the sizes of the samples used in the computations.

Since the samples from which the observed correlation coefficients were obtained were independent, it was necessary to provide an estimation of the probability of occurrence of differences between the three language groups demonstrated in the coefficients. A two-tailed test involving Fisher's transformation, yielding values of z from the correlation coefficient, was selected to provide this estimate of probability.¹ Since

¹J.P. Guilford, *Fundamental Statistics in Psychology and Education*, (New York: McGraw-Hill Book Company, 1956), pp.325-326.

this test produces a critical ratio that is dependent to a considerable extent on the size of the samples, the large numbers involved in the language groups of this study lend greater significance to relatively small differences between the correlations. For example, a difference of .05 between the correlations for the English and French language groups, with numbers for the groups of 4,400 and 70,000, was significant at the one per cent level of confidence.² Some of the tables for which lesser numbers were used in the computations were those involving items from the Grade 12 Staff and Student Questionnaires (students' plans and teachers' ratings), and those involving scores on the Canadian Physics Test and The Canadian Geometry Test administered in Grade 11. For the former, a difference between correlations of .08 was significant at the one per cent level of confidence. For the latter, a difference of .09 was required to produce the same probability level.

The "Length of time in school" factor was a classification involving a breakdown of the first five years of the study into two units for each year. If a student left school before completing the first year of secondary school, he was assigned a "1" classification. If a student left school after completing the first year, and did not attend in the second year, he was assigned a "2". Students leaving in the course of the third year were assigned a "3" and so on. Students who left during the fifth year were assigned a "9" and students who graduated after the fifth year, or were still in attendance after the fifth year, were assigned the top score of "10". Thus the "Length of time in school" factor is not necessarily associated with school success, since a student

² Ibid., p. 326

could conceivably fail every year, and still receive the maximum score on this factor. However, for the most part this factor would presumably be a function of school success.

Table XXXI presents correlations between length of time in school and scores on the Grade 9 aptitude and achievement test battery. When evaluating the results presented in Table XXXI, the nature of each of the nine sub-tests represented must be kept in mind. For all the tests, correlations between test scores and length of time in school were lowest for the French language group and highest for the English language group. Differences between the correlations obtained for the English and French language groups and those obtained for the Other and French language groups were significant at the one per cent level of confidence. Generally, correlations for the Other language group more closely approximated those obtained for the English language group than did those obtained for the French language group. It is suggested from these results that the performance of students on the Grade 9 aptitude and achievement tests did not relate as substantially to school retention for the French language group as it did for the English and Other language groups.

Table XXXII presents correlations between the "Length of time in school" factor, and teachers' ratings of the students on five personal factors on the Grade 9 Staff Questionnaire. For all the factors correlations for the French and Other language groups were very similar, and lower than the correlations for the English language group. The correlations obtained for the English language group were substantially higher than those obtained for the other two language groups on the factors "Chances of success in Grade 13", "Cooperation", and "Reliability", while differences between the three language groups on the factor "Energy" were not pronounced. There was a

TABLE XXXI

CORRELATIONS BETWEEN LENGTH OF TIME IN SCHOOL
AND GRADE 9 APTITUDE AND ACHIEVEMENT TESTS
BY LANGUAGE GROUPS

	French	English	Other
CAAT I	.29	.41	.38
CAAT II	.23	.37	.33
CAAT III	.25	.31	.28
CEAT I	.23	.33	.30
CEAT II	.28	.37	.33
CEAT III	.31	.36	.33
CMAT I	.19	.28	.27
CMAT II	.28	.42	.40
CMAT III	.23	.37	.34

TABLE XXXII

CORRELATIONS BETWEEN LENGTH OF TIME IN SCHOOL
AND STAFF RATINGS IN GRADE 9
BY LANGUAGE GROUPS

	French	English	Other
Reliability	.34	.38	.31
Cooperation	.29	.34	.29
Industry	.35	.38	.32
Energy	.19	.21	.18
Chance of 13	.42	.49	.44

strong relationship evident in all the language groups between the teachers' estimations of the students' chances of Grade 13 success, and length of time in school, and a relatively low correlation for the three language groups between length of time in school and the teachers' ratings of the stamina and energy of the students. For all five factors, the correlations obtained for the Other language group were either slightly smaller in magnitude, or similar to those obtained for the French language group. For the factors "Reliability", "Cooperation", and "Chances of Grade 13 success" differences between the correlations obtained for the English and French language groups were significant at the one per cent level of confidence. For the factors "Reliability", "Cooperation", "Industry", and "Chances of Grade 13 success" differences between the correlations obtained for the English and Other language groups were significant at the one per cent level.

In summary, school success as estimated by the scale applied to the factor "Length of time in school" was more closely related to teachers' ratings on five personal factors for students in the English language group than for students in the Other two language groups, and very similar for students in the French and Other language groups. Differences in the size of the correlations between the French and English language groups were large enough to enable us to conclude that within the relationship between teachers' ratings and school retention, there was a partial explanation for the higher attrition rates manifested by students from the French language group. The nature of this relationship is further clarified in the discussion of multiple discriminant analysis.

Table XXXIII summarizes correlations for the three language groups between the "Length of time in school" factor and the students' plans for

their education future, and their perceptions of their friends' plans and of the educational plans suggested for them by their parents and teachers.³ Correlations obtained for the English and Other language groups were very similar for all factors; the correlations obtained for the French language group were substantially lower. For all three language groups, correlations were of greatest magnitude for the factors "Parents' suggestions" and "Students' own plans", and smallest for "Teachers' suggestions" and "Friends' plans". Differences in the size of the correlations between the English and French language groups, and between the Other and French language groups were significant at the one per cent level of confidence for these dimensions. Differences in the size of correlation between the English and Other language groups only approached the one per cent level of confidence on the factors "Friends' plans" and "Students' own plans". Any interpretation of these correlations must take into account the selection of slightly different educational alternatives by different proportions of each of the language groups.

Table XXXIV summarizes correlations between the "Length of time in school" factor and certain selected socio-economic variables. Each relationship is discussed individually in the following paragraphs.

³The "Educational plan" classification was based on a scale devised from the educational alternatives to Item No. 13 on the Grade 9 Student Questionnaire. The alternative "Complete secondary school, enter university" was given a numerical assignment of "6"; the alternatives "Complete secondary school and enter Teachers' College" and "Complete secondary school and enter school of nursing" were assigned "5"; "Complete secondary school and enter technical or trade training" was assigned "4"; "Complete secondary school and enter a job or work at home" was assigned "3"; "Leave school as soon as possible to enter technical or trade training" was assigned "2"; and "Leave school as soon as possible to take job or work at home" was assigned "1".

TABLE XXXIII

CORRELATIONS BETWEEN LENGTH OF TIME IN SCHOOL
AND EDUCATIONAL PLANS
BY LANGUAGE GROUPS

	French	English	Other
Parents' Suggestions	.23	.35	.35
Teachers' Suggestions	.14	.19	.18
Friends' Plans	.10	.22	.19
Students' Own Plans	.25	.37	.34

TABLE XXXIV

CORRELATIONS BETWEEN LENGTH OF TIME IN SCHOOL
AND SOCIOECONOMIC AND AGE FACTORS
BY LANGUAGE GROUPS

	French	English	Other
Number of Children in Family	-.11	-.17	-.17
Fathers' Education	.13	.24	.11
Mothers' Education	.13	.24	.13
Size of Municipality	.02	.06	.05
Year of Birth	.44	.54	.41
Year of Entrance into Grade	.39	.46	.33

Negative and low correlations for the classification "Number of children in the family" suggest that there was a tendency for students coming from large families to leave school earlier. This relationship was more pronounced for the English and Other language groups. The difference in size of the correlations between the English and French language groups and between the Other and French language groups were significant at the one per cent level of confidence.

A substantial relationship was demonstrated between the age of a student (year of birth) and the length of time he stayed in school, with older students having a greater tendency to leave school early (Table XXXIV). The relationship was greatest for the English language group and least for the Other language group. Differences in the size of the correlations between the English and French language groups and between the English and Other language groups were significant at the one per cent level of confidence, while differences between the French and Other language groups were not significant.

As might be expected, the factor "Year of entrance into Grade 1" was found to be closely related to length of time in school. The correlations obtained were highest for the English language group, and lowest for the Other language group, with all the differences between the three language groups being significant at the one per cent level of confidence. Lower correlations for the Other language group were probably associated with a tendency for educational officials in the Ontario system to assign a student recently immigrated to a grade a year below his age. However, these results do suggest that elementary school retardation was closely associated with secondary school withdrawal.

The correlations between parental education and length of time in school were low but positive (Table XXXIV). The relationship was similar for both the French and Other language groups, but was appreciably stronger for students in the English language group. Differences between the English and Other language groups were significant at the one per cent level of confidence. It must be remembered that there was a much higher proportion of students with parents in the "No secondary school" educational classification for the French and Other language groups, and the correlations inevitably reflect this disproportionate constitution of the various educational classifications.

Correlations were extremely small between length of time in school and the size of the municipality in which the original school of attendance was located (Table XXXIV). This can be accounted for to some extent by the fact that the relationship was apparently not a linear one (Tables LXVIII to LXXI in Chapter 3).

Table XXXV provides an estimate of consistency of teachers' ratings on the same students from Grade 9 to Grade 12. Thus, this table only includes ratings on those students for whom ratings were available in both Grade 9 and Grade 12. The correlations obtained for the English and Other language groups were substantially greater than those obtained for the French language group. There was probably a very strong "halo effect" operating when teachers assessed their students, undoubtedly related to classroom achievement. Therefore it was not surprising to find correlations of similar magnitude for each factor within each language group, particularly with regard to "Reliability", "Cooperation", and "Industry" ratings. However, differences between the English and

TABLE XXXV
CORRELATIONS BETWEEN STAFF RATINGS OF STUDENTS
IN GRADES 9 AND 12
BY LANGUAGE GROUPS

	FRENCH	ENGLISH	OTHER
RELIABILITY	.26	.36	.32
COOPERATION	.23	.32	.30
INDUSTRY	.27	.39	.35
ENERGY	.15	.24	.24
CHANCE OF 13	.50	.57	.55

French language groups and between the Other and French language groups for the factors "Reliability", "Cooperation", "Industry", and "Energy", were significant at the one per cent level of confidence. The classification "Energy" is somewhat nebulous in concept, and it was not surprising to find relatively low correlations for all the language groups for this factor. The greatest relationship was evidenced in the classification "Chances of Grade 13 success" and again, the correlations obtained for the English and Other language groups were significantly greater than those obtained for the French language group ($p < .05$).

Table XXXVI is concerned with correlations between scores on the aptitude and achievement test battery administered in Grade 9, and Grade 9 English marks, Mathematic marks, and grade average. It can be observed throughout this table that correlations obtained for the English and Other language groups were very similar, and for the most part were significantly greater than those obtained for the French language group. However, correlations between scores on CAAT III, and English and Mathematic marks, and Grade 9 average were similar for all three groups, and were varied on CEAT III and CMAT I. The correlations were of low to medium strength for most of the relationships between actual marks and test scores, but tended to be greatest for the CAAT sub-tests. The higher correlations obtained for the English language group between performance on the test battery and Grade 9 marks, might be a function of a condition involving students from homes where the main language spoken is French, in that actual school performance is more likely to be measured partially in terms of other factors than those which can be determined by standardized aptitude and achievement tests prepared specifically for students with an English language background.

TABLE XXXVI
CORRELATIONS BETWEEN GRADE 9 MARKS
AND GRADE 9 APTITUDE AND ACHIEVEMENT TESTS
BY LANGUAGE GROUPS

	Grade 9 English			Grade 9 Mathematics			Grade 9 Average		
	French	English	Other	French	English	Other	French	English	Other
CAAT I	.44	.53	.51	.34	.42	.37	.44	.51	.47
CAAT II	.29	.41	.38	.38	.47	.45	.35	.45	.43
CAAT III	.33	.35	.33	.42	.42	.40	.39	.40	.40
CEAT I	.33	.43	.41	.23	.33	.30	.31	.42	.38
CEAT II	.46	.53	.54	.35	.41	.39	.45	.50	.49
CEAT III	.45	.50	.46	.35	.38	.32	.44	.47	.42
CMAT I	.32	.40	.40	.45	.46	.47	.41	.44	.45
CMAT II	.38	.47	.48	.42	.48	.47	.46	.51	.51
CMAT III	.29	.40	.40	.44	.49	.49	.40	.46	.48

Inter-correlations between the standardized achievement tests directly associated with English language usage, and English marks are presented in Table XXXVII. For the most part, relationships of medium to high strength were obtained for the test battery and its parts. Slightly smaller correlations were obtained for the test battery and Grade 9 English marks. In most cases, however, correlations obtained for the French language group were significantly lower (at the one per cent level of confidence) than those obtained for the English and Other language groups. This condition might also be attributed to a lack of reliability of such instruments when used with students coming from homes in which the main language spoken is French.

Table XXXVIII summarizes inter-correlations between scores on standardized achievement tests related to mathematics, and Grade 9 marks in mathematics. The correlations were relatively strong for all the factors, and in most cases the pattern of correlations obtained for the French language group was very similar to that obtained for the English and Other language groups. This was especially apparent when scores on the achievement tests were related to Mathematics marks in Grade 9, but the inter-correlations between most of the achievement tests were significantly lower (at the one per cent level of confidence) for the French language group.

Table XXXIX summarized the relationship between scores on the Grade 9 aptitude and achievement test battery, and scores on standardized tests administered in Grade 10 and 11. Most of the correlations that appear on this table for the French language group were significantly lower than those for the English and Other language groups. It is probably not useful in terms of the purposes of this study to dwell on the

TABLE XXXVII

INTER-CORRELATIONS BETWEEN
 ENGLISH LANGUAGE ACHIEVEMENT TESTS
 AND GRADE 9 ENGLISH MARKS
 BY LANGUAGE GROUPS

		CEAT I	CEAT II	CEAT III	CATE	TESU
ENGLISH MARKS GRADE 9	FRENCH	.33	.46	.45	.52	.43
	ENGLISH	.43	.53	.50	.57	.45
	OTHER	.41	.54	.46	.56	.41
CEAT I	FRENCH		.43	.49	.40	.34
	ENGLISH		.50	.56	.51	.49
	OTHER		.50	.56	.50	.43
CEAT II	FRENCH			.54	.63	.46
	ENGLISH			.58	.70	.56
	OTHER			.57	.70	.51
CEAT III	FRENCH				.55	.45
	ENGLISH				.60	.55
	OTHER				.59	.52
CATE	FRENCH					.60
	ENGLISH					.70
	OTHER					.69

INTER-CORRELATIONS BETWEEN
MATHEMATICS ACHIEVEMENT TESTS
AND GRADE 9 MATHEMATICS MARKS
BY LANGUAGE GROUPS

		CMAT I	CMAT II	CMAT III	CATM	CPTO	CGTO	SATO MATHEMATICS
MATHEMATICS MARKS GRADE 9	FRENCH	.45	.42	.44	.48	.38	.38	.43
	ENGLISH	.46	.48	.49	.52	.35	.36	.41
	OTHER	.47	.47	.49	.53	.40	.37	.45
CMAT I	FRENCH		.41	.47	.30	.07	.20	.24
	ENGLISH		.43	.50	.38	.16	.23	.32
	OTHER		.44	.51	.39	.18	.23	.35
CMAT II	FRENCH			.61	.46	.43	.35	.50
	ENGLISH			.64	.53	.50	.42	.61
	OTHER			.64	.51	.51	.43	.56
CMAT III	FRENCH				.45	.35	.35	.54
	ENGLISH				.50	.38	.37	.58
	OTHER				.49	.38	.38	.56
CATM	FRENCH					.46	.46	.56
	ENGLISH					.55	.57	.62
	OTHER					.56	.59	.60
CPTO	FRENCH						.51	.51
	ENGLISH						.57	.58
	OTHER						.59	.57
CGTO	FRENCH							.50
	ENGLISH							.56

TABLE XXXIX

CORRELATIONS BETWEEN GRADE 9 APTITUDE AND ACHIEVEMENT TESTS

AND POST GRADE 9 APTITUDE AND ACHIEVEMENT TESTS

BY LANGUAGE GROUPS

		CTGI	CATE	CATI	CATF	CPTO	CGTO
CAAT I	French	.56	.57	.41	.26	.43	.29
	English	.67	.69	.49	.46	.49	.40
	Other	.63	.68	.42	.39	.45	.37
CAAT II	French	.34	.40	.46	.20	.42	.38
	English	.46	.52	.57	.36	.49	.50
	Other	.44	.50	.55	.36	.49	.52
CAAT III	French	.23	.36	.40	.26	.37	.34
	English	.30	.40	.45	.26	.35	.36
	Other	.29	.41	.42	.27	.34	.39
CEAT I	French	.42	.40	.30	.18	.33	.21
	English	.52	.51	.38	.34	.39	.29
	Other	.52	.50	.32	.32	.37	.25
CEAT II	French	.40	.63	.40	.33	.33	.30
	English	.51	.70	.42	.48	.32	.30
	Other	.48	.70	.39	.42	.29	.27
CEAT III	French	.45	.55	.36	.27	.29	.19
	English	.58	.60	.40	.39	.37	.28
	Other	.57	.59	.35	.35	.36	.29
CMAT I	French	.14	.30	.30	.20	.07	.20
	English	.23	.36	.38	.32	.16	.23
	Other	.23	.36	.39	.31	.18	.23
CMAT II	French	.45	.48	.46	.25	.43	.35
	English	.54	.56	.53	.39	.50	.42
	Other	.52	.56	.51	.38	.51	.43
CMAT III	French	.28	.35	.45	.22	.35	.35
	English	.37	.43	.50	.32	.38	.37
	Other	.37	.42	.49	.33	.38	.38

vast number of complex relationships represented in this table.

Table XL summarizes the relationship between the Grade 9 aptitude and achievement test battery, and the Grade 12 SATO test battery. Higher correlations were obtained for the English and Other language groups, and differences between the English and French language groups and the Other and French language groups in terms of these relationships were quite substantial, in almost all cases significant at the one per cent level of confidence. This is another indication of a lack of consistency of students in the French language group when compared with students in the English and Other language groups in terms of performance in standardized test situations.

Table XLI presents correlations between Grade 9 aptitude and achievement test scores, and the student's educational plans, the student's estimate of friends' plans, and student perceptions of parents' and teachers' educational suggestions. If success in school was a function of performance on this test battery, then the relatively small magnitude of the correlations is an indication that there is a great variance between future plans of and for students and their academic potential. The lower correlations obtained for students in the French language group might be explained not only in terms of educational and vocational expectations at variance with academic potential, but also in terms of measurement instrumentation out of step with environmental influences.

Table XLII is concerned with correlations between the educational plans of the students and their perceptions of their friends' plans and recommendations by their parents and teachers in Grade 9, compared with similar recommendations made in Grade 12. The correlations obtained were

TABLE XL

CORRELATIONS BETWEEN GRADE 9 APTITUDE AND ACHIEVEMENT TESTS
AND GRADE 12 SATO TEST BATTERY
BY LANGUAGE GROUPS

		SATO V-I	SATO V-II	SATO TOTAL	SATO MATH
CAAT I	French	.57	.53	.61	.41
	English	.76	.62	.77	.53
	Other	.73	.57	.73	.46
CAAT II	French	.39	.37	.42	.64
	English	.52	.47	.54	.70
	Other	.46	.44	.49	.69
CAAT III	French	.26	.28	.29	.40
	English	.35	.32	.37	.45
	Other	.35	.30	.36	.45
CEAT I	French	.41	.45	.47	.30
	English	.57	.51	.59	.40
	Other	.55	.51	.58	.36
CEAT II	French	.45	.45	.49	.30
	English	.57	.46	.57	.37
	Other	.54	.46	.56	.36
CEAT III	French	.46	.52	.52	.31
	English	.63	.55	.65	.40
	Other	.62	.51	.63	.36
CMAT I	French	.06	.09	.08	.24
	English	.19	.18	.20	.32
	Other	.19	.20	.20	.35
CMAT II	French	.38	.38	.42	.50
	English	.55	.48	.57	.61
	Other	.52	.45	.54	.56
CMAT III	French	.25	.26	.28	.54
	English	.37	.34	.36	.58
	Other	.33	.32	.35	.56

TABLE XLI

CORRELATIONS BETWEEN GRADE 9 APTITUDE AND ACHIEVEMENT TESTS
AND GRADE 9 EDUCATIONAL PLANS
BY LANGUAGE GROUPS

		Parents' Suggestions	Teachers' Suggestions	Friends' Plans	Own Plans
CAAT I	French	.14	.10	.02	.17
	English	.31	.20	.20	.31
	Other	.25	.19	.16	.26
CAAT II	French	.10	.09	.02	.11
	English	.26	.18	.16	.27
	Other	.20	.17	.13	.20
CAAT III	French	.11	.09	.05	.12
	English	.19	.12	.12	.20
	Other	.15	.10	.09	.15
CEAT I	French	.12	.08	.03	.15
	English	.25	.16	.17	.25
	Other	.19	.13	.13	.20
CEAT II	French	.10	.06	.03	.14
	English	.24	.17	.17	.26
	Other	.17	.13	.11	.19
CEAT III	French	.14	.12	.05	.18
	English	.27	.18	.18	.27
	Other	.19	.14	.12	.20
CMAT I	French	.08	.09	.05	.10
	English	.17	.13	.12	.18
	Other	.13	.12	.10	.15
CMAT II	French	.13	.11	.03	.15
	English	.28	.17	.16	.29
	Other	.22	.17	.15	.25
CMAT III	French	.12	.10	.03	.11
	English	.23	.15	.13	.24
	Other	.18	.15	.12	.20

TABLE XLII
CORRELATIONS BETWEEN GRADE 9 EDUCATIONAL PLANS
AND GRADE 12 EDUCATIONAL PLANS
BY LANGUAGE GROUPS

		Teachers' Suggestions	Friends' Plans	Own Plans
Parents' Suggestions	French	.22	.23	.29
	English	.25	.25	.31
	Other	.22	.25	.32
Teachers' Suggestions	French	.20	.18	.23
	English	.23	.18	.21
	Other	.23	.22	.20
Friends' Plans	French	.16	.14	.16
	English	.20	.24	.21
	Other	.16	.21	.19
Own Plans	French	.21	.23	.29
	English	.26	.27	.34
	Other	.24	.28	.34

noticeably low, indicating a lack of consistency in students' plans and perceptions of others' plans for them. At the same time, correlations were very similar for each of the language groups, and it could not be said from this data that French language group students' perceptions of their teachers' and parents' recommendations for future plans were any less consistent than those of students in the English and Other language groups.

Table XLIII presents correlations between scores on the Grade 9 aptitude and achievement test battery, and estimations of the students' capacity and motivations for Grade 13 and university by teachers, from Grade 12 Staff Questionnaire. Generally, one would not expect that a student's motivation and capacity would be identical. Correlations between teachers' assessments of a student's capacity for Grade 13 and university success and achievement and test scores were significantly higher than the correlations between those scores and teachers' assessments of the students' motivation for higher education. For the most part, correlations were significantly lower for the French language group than for the English and Other language groups, a situation which suggests that for the French language group, teachers relied to a greater extent on other indicators of capacity and motivation for advanced schooling than on achievement and aptitude.

The most substantial differences between the French language group and the other two language groups, in terms of correlations between length of time in school, and the capacity and motivation for advanced schooling, are indicated in Table XLIV. Since teachers' ratings on the factors "Capacity for Grade 13", "Motivation for Grade 13",

CORRELATIONS BETWEEN GRADE 9 APTITUDE AND ACHIEVEMENT TESTS
AND STAFF RATINGS OF STUDENTS' CAPACITY AND MOTIVATION
FOR GRADE 13 AND UNIVERSITY
BY LANGUAGE GROUPS

		Capacity for 13	Motivation for 13	Capacity for University	Motivation for University
CAAT I	French	.40	.33	.39	.35
	English	.52	.44	.52	.46
	Other	.45	.38	.45	.38
CAAT II	French	.35	.29	.34	.28
	English	.48	.39	.47	.41
	Other	.44	.35	.43	.35
CAAT III	French	.31	.26	.29	.26
	English	.36	.29	.34	.29
	Other	.35	.30	.34	.28
CEAT I	French	.30	.28	.29	.27
	English	.40	.35	.41	.37
	Other	.35	.27	.35	.29
CEAT II	French	.40	.35	.38	.33
	English	.47	.41	.47	.41
	Other	.44	.36	.40	.34
CEAT III	French	.34	.34	.33	.31
	English	.45	.39	.44	.40
	Other	.41	.32	.38	.32
CMAT I	French	.26	.20	.24	.18
	English	.34	.30	.33	.28
	Other	.30	.25	.29	.25
CMAT II	French	.35	.30	.34	.29
	English	.48	.42	.47	.43
	Other	.43	.34	.41	.35
CMAT III	French	.32	.26	.30	.26
	English	.42	.36	.41	.36
	Other	.39	.31	.38	.31

TABLE XLIV
CORRELATIONS BETWEEN LENGTH OF TIME IN SCHOOL
AND STAFF RATINGS OF STUDENTS' CAPACITY AND MOTIVATION
FOR GRADE 13 AND UNIVERSITY
BY LANGUAGE GROUPS

	French	English	Other
Capacity for 13	.01	.25	.27
Motivation for 13	.04	.30	.35
Capacity for University	.00	.25	.29
Motivation for University	.00	.30	.35

"Capacity for university", and "Motivation for university" were only available for students enrolled in the last half of the fourth year of the study, the maximum number of alternatives remaining for the "Length of time in school" factor would have been four. It must also be considered that many students from French speaking homes might have elected to enter the first year of four-year university programmes offered in centres such as Ottawa and Montreal. However, there is no denying the impact of the correlations presented in this table. While there was a positive medium strength relationship between length of time in school and estimates of capacity for advanced schooling for the English and Other language group students, there was no such relationship demonstrated between these factors for the French language group.

MULTIPLE DISCRIMINANT ANALYSIS

Table CLXXXIV summarizes the mean scores for each of the twenty-five variables included in the multiple discriminant analysis for each of the three language groups. Comparisons between the means by year have been considered in previous chapters. However, since those means were derived in part from data deduced by multiple regression analysis, it should be noted that the means computed with substituted data and the true means obtained from discriminant analysis were approximately the same. Differences between the group means were small and tended to be in the direction of the mean of the English language group. This was to be expected, since the regression analysis was based on the total population, of which the English language group comprised the greater part.

Table XLV presents the discriminant weights obtained for the two functions computed for each year over the first five years of the study, in terms of the three language groups constituted as criterion groups. Thus each yearly computation involved the same variables, but a reduced population since it included only those students enrolled in that particular year. The discriminating power of the predictor variables was assessed through the determination of Wilks lambda which is a function of the roots of $W^{-1}A$, where W is the pooled within-groups matrix of deviation cross-products, and A is the among-groups matrix of weighted group deviation cross-products.⁴

In the computation for the first year, the Wilks lambda criterion measure of the effectiveness of the discrimination was significant at the one per cent level of confidence ($\Lambda = .830$; F -ratio = 319.33, $df = 50/163976$). Chi-square tests⁵ were computed for each of the two discriminant functions to determine the significance of the discrimination along each of the vectors defined by the two linear equations. The chi-square test of significance for each of the roots was significant beyond the one per cent level (first vector chi-square = 11020.51, $df = 26$; second vector chi-square = 4,217.87, $df = 24$). The first vector accounted for 73.2 per cent of the predictable group variation, and the second, 26.8 per cent.

In the first year of the study, the following variables were

⁴W. W. Cooley, and P.R. Lohnes, Multivariate Procedures for the Behavioural Sciences, (New York: John Wiley and Sons, Inc., 1962), pp. 117-118.

⁵C. R. Rao, Advanced Statistical Methods in Biometric Research, (New York: John Wiley and Sons, Inc., 1952), pp. 370-378.

TABLE XLV

DISCRIMINANT WEIGHTS FOR THREE LANGUAGE GROUPS OVER FIVE YEARS¹

	1st Year		2nd Year		3rd Year		4th Year		5th Year	
	1	2	1	2	1	2	1	2	1	2
Sex	.016	.006	-.055	.021	-.142	.039	-.215	.037	-.499	-.080
Reliability Rating by Teacher	.350	-.004	.019	-.017	.011	-.001	.017	.031	.011	.102
Cooperation Rating by Teacher	-.289	-.377	-.579	-.486	-.583	-.429	-.578	-.433	-.527	-.397
Industry Rating by Teacher	.020	.108	-.042	-.154	-.113	-.143	-.108	-.138	-.111	-.119
Energy Rating by Teacher	-.244	-.257	.387	.017	.400	-.032	.393	-.036	.332	-.047
Chances of Completing Gd. 13	-.348	-.331	.132	-.012	.109	-.018	-.099	.015	-.039	.014
CAAT I Score	.163	.140	.071	-.066	.068	-.077	.068	-.062	.064	-.065
CAAT II Score	.230	.175	.161	.150	.152	.127	.153	.119	.111	.135
CAAT III Score	-.087	-.112	.086	-.151	.086	-.170	.078	-.180	.070	-.182
CEAT I Score	-.012	.119	-.066	.301	-.031	.362	-.010	.376	.005	.403
CEAT II Score	.122	.107	.135	.091	.143	.080	.150	.082	.130	.050
CEAT III Score	.075	.090	.069	.074	.058	.062	.049	.057	.043	.023
CMAT I Score	.124	.100	.088	-.034	.098	-.015	.096	-.017	.086	-.010
CMAT II Score	-.280	-.262	.163	-.022	-.181	.013	-.204	.008	-.150	.030
CMAT III Score	-.095	-.250	-.274	-.386	-.264	-.352	-.259	-.344	-.236	-.330
Size of Community	.006	.003	.004	-.029	.001	-.029	.008	-.032	.005	-.020
Year of Birth	.219	.338	.199	.334	.189	.345	.195	.358	.213	.380
Fathers' Occupational Group	-.248	-.096	-.223	.476	-.209	.526	-.174	.517	-.175	.500
Number of Children in Family	-.172	-.189	-.193	-.144	-.205	-.097	-.221	-.070	-.156	-.050
Fathers' Education	.190	.270	-.144	-.149	-.138	-.129	-.141	-.119	-.106	-.120
Mothers' Education	-.297	-.336	.094	.211	.099	.203	.102	.198	.074	.190
Parents' Career Suggestions	-.318	-.217	-.334	-.008	-.305	.032	-.291	.025	-.254	.050
Teachers' Career Suggestions	.095	.070	.099	-.030	.109	-.020	.101	-.020	.138	.010
Friends' Career Plans	.169	.186	-.148	-.094	-.167	-.105	-.154	-.112	-.146	-.110
Students' Career Plans	.024	.031	-.008	-.005	-.013	.010	-.035	.009	-.045	.010

Wilks lambda, F-ratios and chi-squares for each root vector are discussed in the text.

This column represents the first linear function obtained in the analysis. The percentage

the strongest contributors to discrimination along the first function: reliability ratings by teachers, cooperation ratings by teachers, estimation of student's chances of completing Grade 13, student perceptions of parents' career suggestion, mother's education, and performance on CMAT II. The variables with the least discriminating power appeared to be sex, industry ratings by teachers, scores on CAAT III, CEAT I, and CEAT III; community size, student perceptions of teachers' career suggestions, and student's career plans. The second vector was primarily determined by: cooperation ratings by teachers, year of birth, mother's education, estimation of student's chances of completing Grade 13, and scores on CMAT II and CMAT III.

The Wilks lambda in the second year (.923) was of sufficient magnitude to suggest that the discriminating power of the variables was due in part to the large numbers involved in the study. However, the F-ratios and the chi-squares for each of the discriminant functions were significant at the one per cent level of confidence. (F-ratio = 120.40, df = 50/146670; root one chi-square = 4069.50, df = 26; root two chi-square = 1831.05, df = 24). The first root accounted for 69.3 per cent of the variance, and the second, 37.4 per cent of the variance. The predictors from the first function providing the greatest discrimination were: cooperation ratings by teachers, energy ratings by teachers, student perceptions of parents' career suggestions, and CMAT III scores; and the least: sex, reliability ratings by teachers, size of community, student's career plans, and scores on CEAT III, CMAT I, and CAAT III. Cooperation ratings by teachers, father's occupational group, and scores on CEAT I and CMAT III were prominent second function predictors. Again, the year of birth was relatively prominent in both functions.

In the third year, the Wilks lambda was great enough to suggest that

the discriminating power of the linear functions was due in part to the large size of the samples. However, the F-ratio and the chi-squares for each of the two roots were significant at the one per cent level of confidence

($A = .955$; F-ratio = 57.61, $df = 50/124100$; root one chi-square = 1910.97; $df = 26$; root two chi-square = 937.21, $df = 24$). Root one accounted for 74.6 per cent of the variance; and root two, 32.7 per cent. The predictors from the first function providing the greatest contribution to discrimination were: cooperation ratings by teachers, energy ratings by teachers, and student perceptions of parents' career suggestions. The weakest contributors to discrimination were: reliability ratings by teachers, scores on CAAT I, CEAT III and CMAT I, size of community, and student's career plans. Again, year of birth was prominent for both functions, while cooperation ratings by teachers, father's occupational group, and scores on CEAT I, and CMAT III were strong contributors for the second function.

Although the Wilks lambda obtained in the fourth year analysis was .970, the F-ratio and chi-square for each root were significant at the one per cent level of confidence (F-ratio = 32.36, $df = 50/105188$; root one chi-square = 1050.58, $df = 26$; root two chi-square = 555.47, $df = 24$). The first function accounted for 65.5 per cent of the variance, and the second function, 34.5 per cent. The predictors from the first function providing the greatest contribution to discrimination were: cooperation ratings by teachers, energy ratings by teachers, student perceptions of parents' career suggestions, and scores on CMAT III. The least contribution to discrimination was made by: reliability ratings by teachers, estimation of student's chances of completing Grade 13, scores on CEAT I, CEAT III, and CMAT I, size of community, mother's education, and student's career plans. Root one accounted for 64.5 per cent of the variance, and root two, 35.5 per cent. The second vector was primarily

determined by: father's occupational group, scores on CEAT I, and CMAT III, cooperation ratings by teachers, and year of birth.

The size of the Wilks lambda obtained in the fifth-year analysis (.983) indicates that the discriminating power of the functions should be interpreted with caution. However, the criterion measure of effectiveness was significant at the one per cent level of confidence (F-ratio = 12.51, $df = 50/70438$). Chi-squares for each root were also found to be significant at the one per cent level of confidence (root one chi-square = 401.46, $df = 26$; root two chi-square = 221.59, $df = 24$). The discriminating power of the first vector was primarily determined by the following factors: student perceptions of parents' career suggestions, cooperation ratings by teachers, sex of students, and energy ratings by teachers. The least contribution to discrimination was made by: reliability ratings by teachers, estimation of student's chances of completing Grade 13, scores on CAAT I, CAAT III, CEAT I, and CMAT I, size of community, mother's education, and student's career plans. Root one accounted for 64.5 per cent of the variance; and root two, 35.5 per cent. The second vector was primarily determined by: father's occupational group, scores on CEAT I, and CMAT III, cooperation ratings by teachers, and year of birth.

Over the five years of the study, the following factors consistently contributed to the discriminating power of the first functions: energy ratings by teachers, year of birth, father's occupational group, student perceptions of parents' career suggestions, and number of children in the family. The following variables did not contribute substantially to the discriminating power of the primary function in any of the years of the study: size of community, scores on CEAT III and CAAT III, teachers' career suggestions, and student's

career plans. The relationship between the sex of the students and the other variables increased in importance as a discriminant over the five years, while cooperation ratings by teachers was the single most prominent predictor in both functions across the five years.

MULTIPLE DISCRIMINANT ANALYSIS - FRENCH AND ENGLISH

Table XLVI summarizes the discriminant weights obtained in the analysis, involving the French and English language groups for each of the five years. The Wilks lambda for the two groups in the first year was .872. The F-ratio obtained for this computation was 448.91, which was significant at the one per cent level of confidence ($df = 25/76119$). The chi-square obtained for the root of the linear equation was 10470.50 ($df = 25, p < .01$). The scaled vectors, that is the discriminant weights, indicated that the strongest predictors of discrimination along the discriminant function were: reliability ratings by teachers, estimation of student's chances of completing Grade 13, mother's education, and student perceptions of parents' career suggestions. The variables that offered the least discriminating power in the first year were: sex, scores on CAAT III, CEAT I, and CEAT III, size of the community, and student's career plans. Scores on CAAT II and CEAT II were the most prominent discriminators from the Grade 9 test battery.

The Wilks lambda in the second year was again high (.878), but the F-ratio obtained was significant at the one per cent level of confidence (F-ratio = 376.99, $df = 25/68089$). The chi-square test of significance for discrimination by the linear equation was significant beyond the one per cent level. The predictors providing the greatest discrimination in the second year were: reliability ratings by teachers, estimation of student's chances of completing Grade 13, father's occupational group, mother's education, and

TABLE XLVI

DISCRIMINANT WEIGHTS FOR ENGLISH AND FRENCH LANGUAGE GROUPS OVER FIVE YEARS¹

	1st Year	2nd Year	3rd Year	4th Year	5th Year
1. Sex	0.01	0.02	0.02	-0.10	-0.30
2. Reliability Rating By Teacher	0.35	0.36	0.38	0.02	0.01
3. Cooperation Rating By Teacher	-0.29	-0.28	-0.26	-0.57	-0.57
4. Industry Rating By Teacher	0.03	0.01	0.05	-0.11	-0.13
5. Engergy Rating By Teacher	-0.26	0.26	-0.30	0.42	0.38
6. Chances of Completing Gd. 13	-0.34	-0.33	-0.30	-0.09	-0.02
7. CAAT I Score	0.15	0.16	0.17	0.10	0.10
8. CAAT II Score	0.23	0.21	0.18	-0.13	-0.10
9. CAAT III Score	-0.09	-0.10	-0.10	0.08	0.03
10. CEAT I Score	-0.01	-0.01	0.02	-0.02	-0.01
11. CEAT II Score	0.12	0.11	0.11	0.14	0.13
12. CEAT III Score	0.07	0.07	0.06	0.04	0.05
13. CMAT I Score	0.12	0.13	0.15	0.10	0.10
14. CMAT II Score	-0.27	-0.28	-0.28	-0.22	-0.18
15. CMAT III Score	-0.13	-0.14	-0.16	-0.26	-0.26
16. Size of Community	0.00	-0.00	-0.04	-0.01	-0.02
17. Year of Birth	0.22	0.22	0.22	0.20	0.24
18. Fathers' Occupational Group	-0.23	-0.28	-0.27	-0.15	-0.17
19. Number of Children in Family	-0.16	-0.16	0.16	-0.25	-0.19
20. Fathers' Education	0.19	0.19	-0.20	0.08	0.07
21. Mothers' Education	-0.31	-0.29	-0.26	-0.15	-0.12
22. Parents' Career Suggestions	-0.30	-0.32	-0.31	-0.32	-0.31
23. Teachers' Career Suggestions	0.10	0.08	0.10	0.09	0.13
24. Friends' Career Plans	0.17	0.17	-0.20	-0.14	-0.14
25. Students' Career Plans	0.00	0.01	0.02	-0.03	-0.04

1. Wilks lambda, F-ratios and chi-squares for each root vector are discussed in the text

student perceptions of parents' career suggestions. Predictors providing the least discrimination were: sex, industry ratings by teachers, scores on CEAT I, and CEAT III, size of community, student perceptions of teachers' career suggestions, and student's career plans. From the Grade 9 aptitude and achievement test battery, scores on CAAT II and CMAT II provided the strongest discrimination.

The Wilks lambda criterion measure of effectiveness of discrimination between the two language groups, English and French, in the third year of the study was significant at the one per cent level of confidence ($F = .888$; $F\text{-ratio} = 291.58$, $df = 25/57614$, $p < .01$). The chi-square test computed for the discriminant function was significant beyond the one per cent level ($\chi^2 = 6865.43$, $df = 25$). The predictors providing the greatest discrimination in the third year were: reliability ratings by teachers, energy ratings by teachers, estimation of student's chances of completing Grade 13, and student perceptions of parents' career suggestions. Scores on CMAT II provided the greatest discrimination from the test battery. Predictors providing the least discrimination were: sex, industry ratings by teachers, CEAT III scores, size of community, and student's career plans.

Although the Wilks lambda obtained in the fourth year was relatively high (.954) the F -ratio obtained was significant at the one per cent level of confidence ($F\text{-ratio} = 94.03$, $df = 25/48726$). The chi-square test of significance for discrimination by the linear equation was significant beyond the one per cent level ($\chi^2 = 2296.41$, $df = 25$). Predictors providing the greatest discrimination were: cooperation ratings by teachers, energy ratings by teachers, student perceptions of parents' career suggestions. Scores on CMAT II and III provided the greatest prediction from the Grade 9 aptitude and

achievement test battery. Predictors providing the least discrimination were: reliability ratings by teachers, scores on CEAT I and CEAT III, size of community, father's education, student perceptions of teachers' career suggestions, and student's career plans.

The discriminating power of the linear equation in the fifth year was relatively low ($A = .981$), although the F-ratio was significant at the one per cent level of confidence (F-ratio = 26.88, $df = 25/34452$). The chi-square test computation for the discriminant function was significant at the one per cent level of confidence (chi-square = 665.78, $df = 25$). An examination of the scaled weights derived from the vector indicated that the predictors providing the greatest discrimination were: cooperation ratings by teachers, energy ratings by teachers, student perceptions of parents' career suggestions, and sex. Those providing the least discrimination were: reliability ratings by teachers, estimation of student's chances of completing Grade 13, scores on CEAT I and CEAT III, size of community, father's education, and student's educational plans. CEAT III was the major predictor of discrimination from the Grade 9 aptitude and achievement test battery.

Multiple discriminant analysis indicated that the most consistent discriminators between the French and English language groups over the five years of the study were: energy ratings by teachers, year of birth, student perceptions of parents' career suggestions, and scores on CEAT III. Throughout the five years, analysis showed that the following variables contributed negligibly to the discriminating power of the functions that were computed: size of community, student's career plans, and scores on CEAT I and CEAT III. The remaining seven of the nine Grade 9 aptitude and achievement tests operated as consistent low level predictors through the five years of the study. The

variable "Number of children in the family" remained relatively consistent as a low level predictor throughout the five years of the study. Although mother's education was apparently reduced in weight as a discriminator throughout the five years, it still could be considered as a low level discriminator throughout. Reliability ratings by teachers, estimation of student's chances of completing Grade 13, from the Grade 9 Staff Questionnaire, contributed strongly to discrimination in the first three years of the study, but not in the last two years. Cooperation ratings and energy ratings by teachers remained as prominent predictors throughout the five years of the study, increasing in discriminatory power through the last two years of the study. Father's occupational group remained as a mid-strength predictor throughout the five years of the study.

MULTIPLE DISCRIMINANT ANALYSIS - FRENCH AND OTHER

Table XLVII summarizes the discriminant weights obtained for the French and Other language groups for the twenty-five variables over the five years of the study. The Wilks lambda criterion measure of effectiveness of discrimination for the linear function obtained for the first year was significant at the one per cent level of confidence ($\lambda = .640$; F-ratio = 238.80, df = 25/10595). The chi-square test of significance for discrimination by the vector was significant beyond the one per cent level (chi-square = 4740.66, df = 25). An examination of the scaled weights derived from the latent vector indicated that the predictors providing the greatest contribution to discrimination were: father's occupational group, student perceptions of teachers' career suggestions, and scores on CMAT II. Predictors providing the least discrimination were: sex, scores on CAAT III and CEAT III, size of the community, father's education, mother's education, student perceptions of parents' career suggestions and student's career plans. Scores on CAAT I,

DISCRIMINANT WEIGHTS FOR FRENCH AND OTHER LANGUAGE GROUPS OVER FIVE YEARS¹

	1st Year	2nd Year	3rd Year	4th Year	5th Year
1. Sex	0.00	0.01	0.03	0.04	0.13
2. Reliability Rating By Teacher	0.23	-0.12	-0.14	-0.15	-0.16
3. Cooperation Rating By Teacher	-0.19	0.46	0.49	0.48	0.51
4. Industry Rating By Teacher	0.17	-0.09	-0.04	-0.02	-0.05
5. Energy Rating By Teacher	-0.17	-0.42	0.43	0.45	0.39
6. Chances of Completing Gd. 13	-0.14	-0.04	-0.01	-0.00	0.06
7. CAAT I Score	0.18	0.15	0.15	0.14	0.15
8. CAAT II Score	0.23	-0.05	-0.05	-0.05	-0.00
9. CAAT III Score	-0.07	0.19	0.19	0.21	0.21
10. CEAT I Score	-0.25	-0.23	-0.21	-0.22	-0.22
11. CEAT II Score	0.11	0.05	0.06	0.06	0.07
12. CEAT III Score	-0.06	0.05	0.05	0.04	0.05
13. CMAT I Score	0.18	0.12	0.14	0.14	0.12
14. CMAT II Score	0.39	0.05	0.02	0.03	0.00
15. CMAT III Score	0.10	-0.19	-0.20	-0.22	-0.19
16. Size of Community	0.00	0.01	0.00	0.02	0.01
17. Year of Birth	-0.02	-0.00	-0.01	-0.03	0.01
18. Fathers' Occupational Group	-0.45	-0.51	-0.49	-0.48	-0.48
19. Number of Children in Family	-0.15	0.02	-0.00	-0.03	0.03
20. Fathers' Education	0.03	-0.06	-0.06	-0.06	-0.02
21. Mothers' Education	-0.09	-0.06	-0.05	-0.05	-0.08
22. Parents' Career Suggestions	0.10	-0.35	-0.32	-0.31	-0.31
23. Teachers' Career Suggestions	-0.48	0.06	0.07	0.08	0.13
24. Friends' Career Plans	-0.00	0.16	-0.15	-0.11	-0.11
25. Students' Career Plans	0.03	-0.02	-0.04	-0.06	-0.07

1. Wilks lambda, F-ratios and chi-squares for each root vector are discussed in the text.

CAAT II, CEAT I, and CMAT I were mid-level predictors.

The discriminant analysis for the second year of the study between the French and Other language groups produced a Wilks lambda of .833 which was significant at the one per cent level of confidence (F-ratio = 72.43, df = 25/9001). The chi-square test of significance for discrimination by the linear function was significant beyond the one per cent level (chi-square = 1652.12, df = 25). The variables providing the greatest discrimination were: father's occupational group, cooperation ratings by teachers, energy ratings by teachers, and student perceptions of parents' career suggestions. Variables providing the least contribution to discrimination were: sex, industry ratings by teachers, estimation of student's chances of completing Grade 13, scores on CAAT II, CEAT II, and CEAT III, and CMAT II, size of community, year of birth, number of children in the family, father's education, mother's education, student perceptions of teachers' career suggestions, and student's career plans.

The discriminant analysis obtained for the fourth year of the study, in terms of the French and Other language groups, approximated that for the second and third years, while in the fifth year, the major difference was a slightly greater weighting in terms of the sex factor. The Wilks lambda obtained for the fifth-year analysis was .966. This was significant at the one per cent level of confidence (F-ratio = 5.425, df = 25/3846). The chi-square test of significance for discrimination by the vector was significant at the one per cent level of confidence (chi-square = 133.73, df = 25).

In summarizing the five years of discriminant analysis for the French and Other language groups, it was noted that for all the variables, the weighting was approximately the same after the second year. The differences between the first- and second-year discriminant functions were most pronounced for the

variables: reliability ratings by teachers, estimation of student's chances of completing Grade 13, scores on CAAT II, CAAT III, CEAT II, CMAT II, number of children in the family, and student perceptions of parents' career suggestions, teachers' career suggestions, and friends' career plans. Variables providing the strongest discrimination throughout the five years of analysis were: cooperation ratings by teachers, energy ratings by teachers, father's occupational group, and student perceptions of parents' career suggestions. Variables providing the least discrimination between the English, French and Other language groups throughout the five years were: sex, industry ratings by teachers, estimation of student's chances of completing Grade 13, scores on CAAT II, CEAT II, CEAT III, CMAT II, size of community, year of birth, number of children in the family, father's education, mother's education, and student's career plans. Differences in weights for the variables after the second year were small enough to suggest that the basic composition of the groups remained much the same after the first year of the study.

SUMMARY

The first major segment of Chapter VI was concerned with an evaluation of the coefficients of correlation obtained for the variables associated with school retention.

It was found that the correlations between length of time in school and scores on the Grade 9 aptitude and achievement test battery were lowest for the French language group, and highest for the English language group, the Other language group being quite similar to the English language group. It would seem that performance of students on the Grade 9 aptitude and achievement tests did not relate as substantially to school retention for the French language group as for the English and Other language group students. Differences in

the magnitude of the coefficients of correlation obtained for the French and English language groups in terms of length of time in school and teacher ratings on five personal factors were not large enough to indicate that teachers' ratings were associated with differential retention rates. In an examination of the correlations between length of time in school and students' plans and their perceptions of friends' plans, and parents' and teachers' educational suggestions, it was found that students' plans and their perceptions of their parents' plans for them more closely approximated reality than their perceptions of friends' plans and teachers' suggestions. Correlations were similar for the English and Other language groups, and generally higher than the correlations obtained for the French language group.

Correlations between length of time in school and certain socio-economic variables associated with school retention were also examined. The low and negative correlations for the "Number of children in the family" classification suggested that the more children in the family, the greater the tendency for the student to leave school earlier. This phenomenon was more pronounced for the English and Other language group students. A substantial correlation between length of time in secondary school, and length of time in elementary school suggested that the greater the length of time a student spent in elementary school, the greater were his chances of leaving school early. This correlation was also more pronounced for the English and Other language groups than for the French language group. Age of entry into secondary school and the length of time in school were related strongly, particularly for the English language group. Relatively low correlations obtained for the Other language group could be a function of a policy of retarding recently immigrated students by one year relative to their age. The correlations between parental education and length of time in school were low but positive, strongest for the

English language group, and lower but similar for the French and Other language groups. The correlations between length of time in school and the size of the municipality in which the school of attendance was located were not significant, however, the data of Chapter III pointed out that this relationship was not a linear one.

Correlations between Grade 9 and Grade 12 teachers' ratings of the students were found to be lower for the French language group than for the English and Other language groups. This difference might be ascribed to a greater inability on the part of teachers to assess French language group students, and/or to a greater inconsistency of French language group students in school performance over a four-year period.

Correlations between achievement on the Grade 9 aptitude and achievement test battery, and certain other achievement factors, such as Grade 9 English and Mathematics, average marks, and Grade 10, 11, and 12 standardized test scores were found to be of low to medium strength. Correlations for the English and Other language groups were similar to each other, and, in all cases, higher than for the French language group. It was suggested that the lower correlations obtained for the French language group could be associated with the fact that actual school performance of the French language group would more likely be measured in terms of other factors than those determined by standardized tests prepared for students of English language background.

The small magnitude of the correlations between achievement on the Grade 9 test battery and students' future plans, and their perceptions of their friends' plans, and their parents' and teachers' educational suggestions seemed to indicate an inability to assess future possibilities in terms of student potential. The lowest correlations were obtained for the French language group.

students: it was felt that this might be explained not only in terms of expectations at variance with actual potential, but also in terms of measurement instrumentation incompatible with environmental experiences. Correlations between student perceptions of their own and others' future educational plans in Grade 9 and in Grade 12 were low and similar for each language group. The inconsistency in the perceptions of students of their own and others' future educational plans was common to each of the three language groups.

Correlations between scores on the Grade 9 test battery and teachers' estimations of capacity and motivation for Grade 13 and university were significantly lower for the French language group than for the English and Other language groups. This seemed to suggest that for the French language group, teachers relied to a greater extent on other indicators of capacity and motivation for advanced schooling than on achievement and aptitude measures. Correlations between teachers' estimations of capacity and motivation for advanced schooling and length of time in school were low but significant for the English and Other language groups, but not significant for the French language group. While it seemed that the relationship for the French language group students might have been weakened by the fact that many of these students could have been attracted to four-year university programmes in Ottawa and Montreal, this did not detract substantially from the differences between the correlations demonstrated between the three groups.

The second major purpose of this chapter was to interpret the results of the multiple discriminant analysis. Multiple discriminant analysis was employed to determine which variables effectively discriminated between the three language groups within each year of the first five years of the study. The following factors in combination with the remainder of the variables were considered contributors to discrimination in all years: 1) energy ratings

by teachers, 2) cooperation ratings by teachers, 3) student's age, 4) size of the family, and 5) student perceptions of parents' educational suggestions. Although the discriminant weights varied in strength through the five years, there appeared to be no easily discernible pattern to the variance.

The discriminant analysis that focused specifically on the English and French language groups indicated that the following factors were effective discriminators throughout the five years: 1) energy ratings by teachers, 2) student's age, 3) student perceptions of parents' educational suggestions, and 4) scores on the Canadian Mathematics Achievement Test (sub-test III). The major differences between the French and English language groups might be said to lie within three dimensions. The first dimension is associated with teachers' perceptions of students, in terms of apathy or lack of identification with the educational purpose. The second is related to aptitude and achievement test performance, and the third with parental attitudes as they relate to the educational future of their children.

Ratings obtained from teachers' assessments of the reliability of the students acted as prominent discriminators between the French and English language groups in the first three years of analysis, but not the last two, a situation which suggests that many students from the French language group whose ratings contributed to this discrimination withdrew from school at the end of the third year.

There was a remarkable consistency demonstrated in the magnitude of the discriminant weights obtained in the five analyses involving the French and Other language groups. The most prominent discriminators were: 1) ratings of the students by their teachers for the factors "Cooperation" and "Energy", 2) father's occupational group, and 3) student perceptions of parents' career

suggestions.

Teacher ratings, especially on the factors "Energy", and "Cooperation", were prominent in the discrimination between both the French and English groups, and the French and Other groups. Although age was a discriminant between the English and French language groups, it was not as prominent a discriminating factor between the French and Other language groups. The data of Chapter IV pointed out gross differences between the performance of the French language group and the English and Other language groups on the Grade 9 achievement and aptitude test battery. One of the advantages of multi-variate analysis is that it looks at each factor in terms of the other factors involved in the analysis. Thus, although the test performance factor seemed extremely prominent in the earlier analyses in combination with the other variables, its impact as a discriminant was reduced.

CHAPTER VII

SUMMARY AND CONCLUSIONS

The Carnegie Study of Identification and Utilization of Talent in High School and College employed data collected on the secondary school careers of 90,719 students enrolled in Grade 9 of the public, private and separate schools of Ontario in 1959. The study followed these students through their secondary school careers, and developed information from a number of sources, including Staff and Student Questionnaires, academic aptitude and achievement tests, school marks, interest inventories, and withdrawal forms.

In a preliminary analysis of this material, it was discovered that there was a considerable difference in the retention rates of three language groups, classified on the basis of language spoken in the home, in the Ontario secondary school system. The differences in retention rates were most pronounced when the low French rate was compared with the rates of two other language groups - English and Other. (The Other language group was a composite of all students who indicated that the main language spoken in their homes was something other than French and English.)

It was hypothesized that the difference in retention rates could be attributed to the fact that the French language group contained a disproportionate representation of students in socio-economic

classifications often associated with low school retention rates. The study undertook primarily, therefore, to examine the factor of socio-economic background as it relates to retention, to determine whether such factors as fathers' occupation, size of community where school located, parents' education, number of children in the family, and geographic location of school attended could account for differential retention rates.

At the same time, it was decided to examine the test scores and teachers' ratings of students from the three language groups to see if low aptitude, low achievement, or low ratings were associated with differential retention rates.

On the basis of their responses to Item No. 5 on the Grade 9 Student Questionnaire, 82,500 students were classified into three language categories according to the language spoken in their homes. There were 71,819 students in the English language group, 4,850 in the French language group, and 5,831 in the Other language group. For the purposes of the study, the term "withdrawal" was used to refer to a student who left school for employment, further education, marriage, or imprisonment, but not because of transfer out of the province, death, or illness. (Students in the latter three classifications were not included in the analysis). There was also a geographical breakdown of students introduced, based on the concept that educational opportunities vary in terms of economic factors which tend to be localized.

The chi-square test was employed to test differences between observed results and those expected on the basis of the assignment to each classification for each language group in Grade 9. The product-

moment coefficient of correlation provided a measure of relationship between the variables under investigation, while multiple discriminant analysis was applied to the data for the purpose of determining which factors contributed most to discrimination among the three language groups and between pairs of language groups in each year of the study.

CONCLUSIONS

A Retention Rates

The data clearly demonstrated that there was a striking grade retention differential between the students in the three language groups with which this study was concerned. It was apparent that at all grade levels, the highest retention rate was maintained by those students classified in the Other language group, and the lowest by the students in the French language group. Differences between English and Other language group students and French language group students were most prominent in Grade 13 where the proportionate enrolment favoured the English and Other language groups by a ratio of three-to-one. The ratio of students receiving Honour Graduation Diplomas after five years favoured the English language group over the French language group by a margin of four-to-one, and the Other language group over the French language group by a margin of five-to-one. Of those students who attempted the Grade 13 examinations, 55 per cent of the English language group and 57 per cent of the Other language group were successful, while 36 per cent of the French language group were successful.

An examination of the yearly retention rates indicated that by the fifth year of the study, proportionately twice as many students in the English and Other language groups as in the French language group

continued in attendance, yearly retention rates for the English and Other language group students having been similar throughout the five years of the study. Further, it was found that there were relatively more students in the English and Other classifications enrolled in the sixth year of the study. Since the English and Other language group students had a greater percentage of success in Grade 13 than the French, it was not possible to suggest that the reduced percentage of French students still enrolled in the sixth year was a function of greater success on Grade 13 examinations.

The girls in the English and French language groups were more successful in school than the boys, but after Grade 10 in the Other language group, they were less successful than the boys. More girls than boys by proportion in all three language groups withdrew after Grade 12. The girls from the English and Other language groups were more successful than the boys on the Grade 13 examinations, but the girls and boys from the French language group performed equally well.

B Socio-Economic Variables

The main theme of this study was to clarify the relationship between school retention and certain socio-economic variables in order to determine whether retention differences between the three language groups could be accounted for by differential representation of the three language groups in socio-economic classifications commonly associated with secondary school withdrawal. The socio-economic classifications selected from the data for specific investigation were: fathers' occupation, number of children in the family, size of community where school located, parents' education, geographical location

of the school, and future educational plans.

It was found that the three language groups were not proportionately represented in each of the "Fathers' education" classifications. A larger proportion of the English language group students than students from the French and Other language groups classified their fathers as being "Executives" or "Professionals". More of the Other language group students placed their fathers in the "Factory Work" classification, while French students emphasized the "Farm category." The other occupational classifications had similar representation of fathers from each language group. At the same time, it was established that secondary school success was related to some extent to fathers' occupation. However, in view of the fact that the proportionate ratio of English, French, and Other language group enrolment and graduation rates remained constant through all the occupational classifications, it appeared that differences in retention rates and numbers of graduates among the three language groups could not be explained in terms of differential language group representation in occupational classifications.

The data indicated that a larger proportion of the French language group was enrolled in schools in smaller communities. It was found however, that the size of the community in which the student was enrolled was only slightly related to school retention. Furthermore, retention and graduation proportionate ratios remained relatively constant through all population classifications examined. It was therefore concluded that this factor - size of community in terms of population - was not significantly related to retention differences among the three language groups.

There were pronounced differences between students from the three language groups in terms of parental education, the parents of the English language group students having achieved the highest educational level of the three language groups. The educational background of parents of students in the Other language group was slightly higher than that of the French language group. Since there was a positive relationship demonstrated between parental education and secondary school retention, there was no doubt that the high representation of the French language group in the lower educational classifications was associated with the lower retention and graduate figures for this group. However, the relatively low attrition rate in the Other language group could not be explained in terms of this phenomenon.

An examination of retention and graduation rates in terms of geographic location of the school in which the student was enrolled showed that the proportionate ratios of English, French, and Other language group enrolment and graduation rates which became apparent in the original analysis were maintained with only slight variation through all geographic locations examined. It appeared that differences in retention rates between the English and French language group students could not be simply explained by a differential representation of the French language group students in districts selected on the basis of high concentrations of French language population.

It was found that a much larger proportion of French language group students than those from the other language groups came from large families (five or more children). Correspondingly, English and Other language group students had far greater representation in the one- and

two-child family classifications. Family size, therefore, effectively discriminated between the French language group and the English and Other language group students. Although there was a small and negative relationship demonstrated between family size and retention, proportionate ratios were maintained throughout all the "Number of Children in the Family" Classifications between the English and Other language groups and the French language group in terms of fifth-year enrolments and percentage of Honour Graduation Diplomas, indicating that this particular socio-economic factor did not offer an explanation for the retention differences between the three language groups.

The future educational plans of the students in the three language groups were also examined. It was discovered that all three groups were equally positive in their determination to complete secondary school. However, it was apparent that students in the Other and English language groups were more university-oriented than students in the French language group, who showed a greater interest in other vocational fields such as nursing, teaching, and technical training. Since French language students indicated that they were more aware than students in the other two language groups of the possibility of leaving school before completion, it was hypothesized that this, coupled with a vocational orientation, might be associated to some extent with the attrition syndrome.

C. Aptitude and Achievement Tests

The students who wrote the Grade 9 test battery - the Canadian

Academic Achievement Test, the Canadian English Achievement Test, and the Canadian Mathematics Achievement Test - were divided into quartiles on the basis of their test performances. Within each of the quartiles retention rates of the three language groups were compared in order to estimate the extent of the influence of aptitude and achievement factors on school retention.

It was apparent that students from the French language group performed at a lower level than students from the English and Other language groups on all of the sub-tests. For the most part, the English group performed at a slightly higher level than the Other language group. Differences between the English and Other language groups, and the French language group were more substantial on the type of test requiring English verbal facility and less substantial, but still pronounced on tests requiring non-verbal reasoning or mathematical ability.

A strong relationship was demonstrated between the scores on these tests, and school retention. The retention differences between the language groups were far less within each of the quartiles than the differences obtained for the total population within each group, but they were still prominent and substantial within most of the quartiles of the sub-tests. Differences among the language groups were less for students scoring in the lower two quartiles; in some cases, the French language group was slightly favoured. If the English and Other language groups were reconstituted using the same proportions by quartile achieved by the French language group on the sub-tests, the retention rates and proportions of graduates would become very similar. Thus, it would appear the comparatively poor performance of students from the French language group on aptitude and achievement tests was associated with their low

achievement level in secondary school and correspondingly high attrition rates.

D Secondary Factors Associated with School Retention

An examination was made of certain other factors which were considered to be related to school retention. These factors were: age at entry into secondary school, number of transfers from school to school, effect of Grade 9 repetition, and ratings of students by their teachers on reliability, co-operation, industry, physical stamina and energy, and chance of completing Grade 13 successfully.

The English language group was younger on the average than the other two language groups, and contained a greater proportion of elementary school accelerates and a smaller proportion of elementary school retardates. There were similar proportions of the French and Other language group students retarded in school by Grade 9, but it was suggested that for the Other language group students, this condition was related to the commonplace occurrence of placing children of recent immigrants one grade behind. A strong relationship was demonstrated between age and school retention (greater for the English and French language groups than for the Other language group), with younger students tending to stay in school longer.

It was found that the French language group transferred from school to school less than the other two language groups, but this was probably related to the fact that the French language group did not remain in school as long.

The data on Grade 9 repetition, rather than pointing out differences among the three language groups, demonstrated that students who failed Grade 9 had only a one per cent chance of completing Grade 13.

The French language group students received more "Average" and "Below Average" ratings and fewer "Above Average" ratings from their teachers than the English and Other language group students on the factors "Reliability", "Co-operation", "Industry", and "Stamina and Energy". High retention rates were generally associated with high ratings on these factors, but retention rates in each of the sub-classifications favoured the English and Other language group students over the French language group students. Fewer students by proportion in the French language group than in the English and Other language groups were rated as having an "Above Average" chance of completing Grade 13 successfully.

E Multi-Variate Analysis

An examination of the coefficients of correlation obtained for the variables associated with school retention indicated that for the most part, correlations obtained for the French language group were significantly lower than those obtained for the English and Other language groups. Since the concern of this study was primarily that of looking at differences between the language groups, the implications of the size of the coefficients of correlation were not considered at length.

Length of time in school was introduced as a variable and was measured by dividing the first five years of school attendance into ten time units. When length of time in school was correlated with other variables, significant differences between the English and

French language groups were found for the following variables: age at entry into secondary school, parents' education, Grade 9 aptitude and achievement test scores, and future educational plans. For most of these relationships, correlations obtained for the English and Other language groups were very similar.

Correlations between Grade 9 and Grade 12 teachers' ratings were of low strength, and were significantly lower for the French language group than for the English and Other language groups. Inter-correlations between the factors of Grade 9 English and Mathematics marks, Grade 9 average, and Grade 9 aptitude and achievement test scores, were of low to medium strength and for the most part were significantly higher for the English and Other language groups than for the French language group.

Since multiple discriminant analysis introduced an estimate of inter-relationship between variables when assigning weights to factors which contributed most to discrimination between the language groups, factors that were not so prominent in earlier discussions of the data come to the fore as high level discriminants. This was especially true of teachers' ratings on "Stamina and Energy" and "Co-operation", age, number of children in the family, and student perceptions of parents' educational suggestions. Although these factors varied in weight within each of the two functions, they were prominent in each of the five years of the three-group analyses.

Teachers' ratings on "Stamina and Energy", age, and student perceptions of parents' educational suggestions were also prominent discriminants in the five years of analysis involving the English and

French language groups, as was performance on the Canadian Mathematics Achievement Test, sub-test III. Teachers' ratings on "Reliability" acted as a discriminant in the first three years of the study, but not in the last two. Thus, it could be said that students who left school at the end of three years contributed to discrimination along this dimension.

In the analysis involving the French and Other language groups, the discriminant weights obtained proved to be remarkably consistent throughout the five years for which computations were made. Again, teachers' ratings of students on the basis of "Stamina and Energy" and "Co-operation", and student perceptions of parents' educational suggestions were prominent discriminants.

DISCUSSION

The student from the French language group, on the basis of data from this study, can be characterized as (1) being perceived by his teachers a less co-operative, less reliable, having less motivation, stamina, and energy, and having a poorer chance of being successful in Grade 13 than his peers, (2) producing a relatively unstable picture of himself as evidenced by the inconsistency of teacher ratings on him and his performance on aptitude and achievement tests, (3) having parents with high fertility rates but low educational levels, (4) performing at a lower level than his peers on school examinations as well as on standardized aptitude and achievement tests, and (5) being more likely to leave school than his peers. On the other hand, the student from the composite minority group (designated as the Other language group) was as likely to perform as well in school as the student

from the English language group, and more likely to stay in school until the successful completion of Grade 13.

Since it could be assumed that students from both the French and Other language groups were essentially bilingual, a brief consideration of the relationship between school performance and bilingualism on the basis of the data generated in the study is feasible. There is some evidence from other studies that bilingual children have some difficulty in performing at their actual level of ability on standardized aptitude and achievement tests. If success in school is functionally related to performance on this type of test, as seemed to be indicated by the data of this study, then one might conclude that the bilingual student faces an educational process which must inevitably discriminate against him. However, since students from the Other language group must also be categorized as "bilingual" by our definition, bilingualism as a single factor does not appear to explain the retention differences manifested in the data of this study.

The purpose of this investigation has not been to offer conjecture regarding differing value systems or environmental stimuli, but to look at specific data as it related to the relatively low secondary school retention rates of students from homes in which the main language spoken was French. Although relationships between school retention and scales derived from teachers' ratings of students and socio-economic classifications were demonstrated, taken together or separately these factors could not be presumed to account for secondary school retention differences among the language groups. But if it is assumed that success in school requires the same abilities that are

measured in standardized aptitude and achievement tests, school retention differences can be explained in terms of the relatively poor performance of the French language group students on these tests. The effects of elementary school preparation, whether separate or public, of cultural assimilation, and of religious or ethnic values cannot be judged from the data and are considered to be outside the limits of this investigation.

APPENDIX A

Tables

TABLE XLVIII

YEARLY RETENTION RATES BY FATHERS' OCCUPATION CLASSIFICATION

"PROFESSIONAL"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		6th Year	
	N	%	N	%	N	%	N	%	N	%	N	%
French	84	100.0	74	88.1	60	71.4	55	65.5	31	36.9	5	6.0
English	3,501	100.0	3,396	97.0	3,266	93.3	3,113	88.9	2,715	77.5	873	24.9
Other	153	100.0	143	93.5	130	85.0	124	81.0	108	70.6	22	14.4
Total	3,738	100.0	3,618	96.7	3,456	92.5	3,292	88.1	2,854	76.4	900	24.1

 χ^2 (5th Year) = 18.44 (.001)

TABLE XLIX

YEARLY RETENTION RATES BY FATHERS' OCCUPATION CLASSIFICATION

"EXECUTIVE"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		6th Year	
	N	%	N	%	N	%	N	%	N	%	N	%
French	141	100.0	119	84.4	95	67.4	89	63.1	48	34.0	14	9.9
English	5,472	100.0	5,208	95.2	4,767	87.1	4,319	78.9	3,504	64.0	1,307	23.9
Other	130	100.0	118	90.8	102	78.5	92	70.8	76	58.5	26	20.0
Total	5,743	100.0	5,445	94.8	4,964	86.4	4,500	78.4	3,628	63.2	1,347	23.5

 χ^2 (5th Year) = 20.04 (.001)

TABLE XLIX

YEARLY RETENTION RATES BY FATHERS' OCCUPATION CLASSIFICATION

"EXECUTIVE"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		6th Year	
	N	%	N	%	N	%	N	%	N	%	N	%
French	141	100.0	119	84.4	95	67.4	89	63.1	48	34.0	14	9.9
English	5,472	100.0	5,208	95.2	4,767	87.1	4,319	78.9	3,504	64.0	1,307	23.9
Other	130	100.0	118	90.8	102	78.5	92	70.8	76	58.5	26	20.0
Total	5,743	100.0	5,445	94.8	4,964	86.4	4,500	78.4	3,628	63.2	1,347	23.5

$$\chi^2 (5th Year) = 20.04 (.001)$$

T A B L E L

YEARLY RETENTION RATES BY FATHERS' OCCUPATION CLASSIFICATION

"SALESMAN"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		6th Year	
	N	%	N	%	N	%	N	%	N	%	N	%
French	193	100.0	164	85.0	127	65.8	99	51.3	61	31.6	26	13.5
English	4,446	100.0	4,135	93.0	3,656	82.2	3,251	73.1	2,525	56.8	994	22.4
Other	134	100.0	119	88.8	102	76.1	93	69.4	70	52.2	26	19.4
Total	4,773	100.0	4,418	92.6	3,885	81.4	3,443	72.1	2,656	55.6	1,046	21.9

$$\chi^2 (5th Year) = 21.37 (.001)$$

T A B L E L I

YEARLY RETENTION RATES BY FATHERS' OCCUPATION CLASSIFICATION

"SMALL BUSINESS"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		6th Year	
	N	%	N	%	N	%	N	%	N	%	N	%
French	269	100.0	219	81.4	171	63.6	140	52.0	71	26.4	24	8.9
English	4,759	100.0	4,356	91.5	3,833	80.5	3,372	70.9	2,542	53.4	990	20.8
Other	378	100.0	335	88.6	292	77.2	268	70.9	196	51.9	70	18.5
Total	5,406	100.0	4,910	90.8	4,296	79.5	3,780	69.9	2,809	52.0	1,084	20.1

$$\chi^2 (5th Year) = 35.78 (.001)$$

TABLE LII

YEARLY RETENTION RATES BY FATHERS' OCCUPATION CLASSIFICATION

"OFFICE WORK"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		6th Year	
	N	%	N	%	N	%	N	%	N	%	N	%
French	273	100.0	244	89.4	204	74.7	180	65.9	71	26.0	28	10.3
English	5,524	100.0	5,183	93.8	4,665	84.4	4,217	76.3	3,192	57.8	1,268	23.0
Other	120	100.0	114	95.0	101	84.2	94	78.3	77	64.2	26	21.7
Total	5,917	100.0	5,541	93.6	4,990	84.0	4,491	75.9	3,340	56.4	1,322	22.3

$$\chi^2 (5th Year) = 47.83 (.001)$$

TABLE LIII

YEARLY RETENTION RATES BY FATHERS' OCCUPATION CLASSIFICATION

"FARM"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		6th Year	
	N	%	N	%	N	%	N	%	N	%	N	%
French	631	100.0	510	80.8	327	51.8	246	39.0	135	21.4	33	5.2
English	7,063	100.0	6,271	88.8	5,286	74.8	4,407	62.4	3,081	43.6	969	13.7
Other	543	100.0	479	88.2	404	74.4	337	62.1	231	42.5	50	9.2
Total	8,237	100.0	7,260	88.1	6,017	73.0	4,990	60.6	3,447	41.8	1,052	12.8

$$\chi^2 (5th Year) = 68.45 (.001)$$

T A B L E L I V

YEARLY RETENTION RATES BY FATHERS' OCCUPATION CLASSIFICATION

"SKILLED TRADE"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		6th Year	
	N	%	N	%	N	%	N	%	N	%	N	%
French	931	100.0	721	77.4	534	57.4	397	42.6	207	27.2	63	6.8
English	12,587	100.0	11,077	88.0	9,294	73.8	7,693	61.1	5,283	42.0	1,996	15.9
Other	1,379	100.0	1,238	89.8	1,067	77.4	938	68.0	665	48.2	229	16.6
Total	14,897	100.0	13,036	87.5	10,895	73.1	9,028	60.6	6,155	41.3	2,288	15.4

χ^2 (5th Year) = 99.28 (.001)

T A B L E LV

YEARLY RETENTION RATES BY FATHERS' OCCUPATION CLASSIFICATION

"FACTORY WORK"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		6th Year	
	N	%	N	%	N	%	N	%	N	%	N	%
French	993	100.0	751	75.6	541	54.5	387	39.0	229	23.1	55	5.5
English	14,320	100.0	12,382	86.5	10,126	70.7	8,279	57.8	5,321	37.2	1,972	13.8
Other	1,965	100.0	1,763	89.7	1,508	76.7	1,346	68.5	941	47.9	302	15.4
Total	17,278	100.0	14,896	86.2	12,175	70.5	10,012	57.9	6,491	37.6	2,329	13.5

$$\chi^2 (5th Year) = 111.97 (.001)$$

T A B L E LVI

YEARLY RETENTION RATES BY FATHERS' OCCUPATION CLASSIFICATION

"OTHER"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		6th Year	
	N	%	N	%	N	%	N	%	N	%	N	%
French	995	100.0	763	79.9	520	54.5	386	40.4	213	22.3	72	7.5
English	10,580	100.0	9,128	86.3	7,493	70.8	6,095	57.6	4,182	39.5	1,588	15.0
Other	725	100.0	628	86.6	495	68.3	419	57.8	290	40.0	88	12.1
Total	12,260	100.0	10,519	85.8	8,508	69.4	6,900	56.3	4,685	38.2	1,748	14.3

$$\chi^2 (5th Year) = 78.93 (001)$$

T A B L E LVII

YEARLY RETENTION RATES BY FATHERS' OCCUPATION CLASSIFICATION

"DO NOT KNOW"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		6th Year	
	N	%	N	%	N	%	N	%	N	%	N	%
French	157	100.0	103	65.6	67	42.7	43	27.4	25	15.9	8	5.1
English	1,409	100.0	1,116	79.2	844	59.9	648	46.0	391	27.8	145	10.3
Other	140	100.0	116	82.9	95	67.9	82	58.6	60	42.9	16	11.4
Total	1,706	100.0	1,335	78.3	1,006	59.0	773	45.3	476	27.9	169	9.9

$$\chi^2 (5th Year) = 19.31 (.001)$$

T A B L E LVIII

GRADE RETENTION RATES BY FATHERS' OCCUPATION CLASSIFICATION

"PROFESSIONAL"

	Grade 9		Grade 10		Grade 11		Grade 12		Grade 13		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	84	100.0	56	66.7	47	56.0	39	46.4	16	19.0	14	16.7
English	3,501	100.0	3,042	86.9	2,647	75.6	2,393	68.4	1,870	53.4	1,331	38.0
Other	153	100.0	128	83.7	108	70.6	103	67.3	83	54.2	64	41.8
Total	3,738	100.0	3,226	86.3	2,802	75.0	2,535	67.8	1,969	52.7	1,409	37.7

$$\chi^2 (\text{Grads.}) = 10.64 (.005)$$

T A B L E LIX

GRADE RETENTION RATES BY FATHERS' OCCUPATION CLASSIFICATION

"EXECUTIVE"

	Grade 9		Grade 10		Grade 11		Grade 12		Grade 13		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	141	100.0	98	69.5	73	51.8	54	38.3	18	12.8	7	5.0
English	5,472	100.0	4,448	81.3	3,516	64.3	2,990	54.6	2,087	38.1	1,353	24.7
Other	130	100.0	104	80.0	82	63.1	68	52.3	53	40.8	32	24.6
Total	5,743	100.0	4,650	81.0	3,671	63.9	3,112	54.2	2,158	37.6	1,392	24.2

$$\chi^2 (\text{Grads.}) = 22.15 (.001)$$

T A B L E LX

GRADE RETENTION RATES BY FATHERS' OCCUPATION CLASSIFICATION

"SALESMAN"

	Grade 9		Grade 10		Grade 11		Grade 12		Grade 13		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	193	100.0	132	68.4	90	46.6	61	31.6	22	11.4	10	5.2
English	4,446	100.0	3,431	77.2	2,576	57.9	2,081	46.8	1,297	29.2	778	17.5
Other	134	100.0	103	76.9	83	61.9	71	53.0	47	35.1	34	25.4
Total	4,773	100.0	3,666	76.8	2,749	57.6	2,213	46.4	1,366	28.6	822	17.2

$$\chi^2 (\text{Grads.}) = 21.61 (.001)$$

TABLE LXI

GRADE RETENTION RATES BY FATHERS' OCCUPATION CLASSIFICATION

"SMALL BUSINESS"

	Grade 9		Grade 10		Grade 11		Grade 12		Grade 13		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	269	100.0	181	67.3	128	47.6	91	33.8	28	10.4	9	3.3
English	4,759	100.0	3,635	76.4	2,715	57.0	2,213	46.5	1,336	28.1	737	15.5
Other	378	100.0	295	78.0	244	64.6	208	55.0	130	34.4	85	22.5
Total	5,406	100.0	4,111	76.0	3,087	57.1	2,512	46.5	1,494	27.6	831	15.4

$$\chi^2 (\text{Grads.}) = 37.80 (.001)$$

T A B L E LXII

GRADE RETENTION RATES BY FATHERS' OCCUPATION CLASSIFICATION

"OFFICE WORK"

	Grade 9		Grade 10		Grade 11		Grade 12		Grade 13		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	273	100.0	203	74.4	165	60.4	132	48.4	29	10.6	11	4.0
English	5,524	100.0	4,367	79.1	3,363	60.9	2,811	50.9	1,723	31.2	991	17.9
Other	120	100.0	105	87.5	85	70.8	76	63.3	50	41.7	32	26.7
Total	5,917	100.0	4,675	79.0	3,613	61.1	3,019	51.0	1,802	30.5	1,034	17.5

 $\chi^2 (\text{Grads.}) = 34.73 (.001)$

T A B L E LXIII

GRADE RETENTION RATES BY FATHERS' OCCUPATION CLASSIFICATION

"FARM"

	Grade 9		Grade 10		Grade 11		Grade 12		Grade 13		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	631	100.0	395	62.6	223	35.3	159	25.2	59	9.4	19	3.0
English	7,063	100.0	5,065	71.7	3,645	51.6	2,909	41.2	1,561	22.1	748	10.6
Other	543	100.0	420	77.3	321	59.1	261	48.1	153	28.2	82	15.1
Total	8,237	100.0	5,880	71.4	4,189	50.9	3,329	40.4	1,773	21.5	849	10.3

$$\chi^2 (\text{Grads.}) = 45.25 (.001)$$

TABLE LXIV

GRADE RETENTION RATES BY FATHERS' OCCUPATION CLASSIFICATION

"SKILLED TRADE"

	Grade 9		Grade 10		Grade 11		Grade 12		Grade 13		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	931	100.0	559	60.0	349	37.5	224	24.1	67	7.2	24	2.6
English	12,587	100.0	8,883	70.6	6,158	48.9	4,767	37.9	2,468	19.6	1,222	9.7
Other	1,379	100.0	1,097	79.6	858	62.2	738	53.5	435	31.5	226	16.4
Total	14,897	100.0	10,539	70.7	7,365	49.4	5,729	38.5	2,970	19.9	1,472	9.9

$$\chi^2 (\text{Grads.}) = 109.74 (.001)$$

T A B L E LXV

GRADE RETENTION RATES BY FATHERS' OCCUPATION CLASSIFICATION
"FACTORY WORK"

	Grade 9		Grade 10		Grade 11		Grade 12		Grade 13		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	993	100.0	573	57.7	333	33.5	225	22.7	98	9.9	38	3.8
English	14,320	100.0	9,778	68.3	6,528	45.6	4,929	34.4	2,290	16.0	1,066	7.4
Other	1,965	100.0	1,538	78.3	1,177	59.9	981	49.9	558	28.4	308	15.7
Total	17,278	100.0	11,889	68.8	8,038	46.5	6,135	35.5	2,946	17.1	1,412	8.2

χ^2 (Grads.) = 167.56 (.001)

T A B L E LXVI

GRADE RETENTION RATES BY FATHERS' OCCUPATION CLASSIFICATION

"OTHER"

	Grade 9		Grade 10		Grade 11		Grade 12		Grade 13		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	955	100.0	602	63.0	347	36.3	236	24.7	76	8.0	22	2.3
English	10,580	100.0	7,168	67.8	4,849	45.8	3,700	35.0	1,920	18.1	997	9.4
Other	725	100.0	541	74.6	384	53.0	316	43.6	169	23.3	90	12.4
Total	12,260	100.0	8,311	67.8	5,580	45.5	4,252	34.7	2,165	17.7	1,109	9.0

$$\chi^2 (\text{Grads.}) = 58.75 (.001)$$

TABLE LXVII

GRADE RETENTION RATES BY FATHERS' OCCUPATION CLASSIFICATION

"DO NOT KNOW"

	Grade 9		Grade 10		Grade 11		Grade 12		Grade 13		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	157	100.0	67	42.7	28	17.8	18	11.5	8	5.1	1	.6
English	1,409	100.0	773	54.9	480	34.1	344	24.4	137	9.7	65	4.6
Other	140	100.0	97	69.3	69	49.3	55	39.3	31	22.1	17	12.1
Total	1,706	100.0	937	54.9	577	33.8	417	24.4	176	10.3	83	4.9

$$\chi^2 (\text{Grads.}) = 21.19 (.001)$$

T A B L E LXVIII

YEARLY RETENTION RATES BY SIZE OF MUNICIPALITIES IN WHICH STUDENTS ENROLLED IN GRADE 9

"UNORGANIZED"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	149	100.0	115	77.2	68	45.6	34	22.8	11	7.4	2	1.3
English	228	100.0	180	78.9	111	48.7	94	41.2	59	25.9	12	5.3
Other	29	100.0	21	72.4	10	34.5	10	34.5	5	17.2		.0
Total	406	100.0	316	77.8	189	46.6	138	34.0	75	18.5	14	3.4

$$\chi^2 (5th Year) = 16.71 (.001)$$

$$\chi^2 (Grads.) = 5.09 (.10)$$

T A B L E LXIX

YEARLY RETENTION RATES BY SIZE OF MUNICIPALITIES IN WHICH STUDENTS ENROLLED IN GRADE 9

"UP TO 999"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	156	100.0	129	82.7	73	46.8	46	29.5	19	12.2	3	1.9
English	1,425	100.0	1,197	84.0	985	69.1	771	54.1	533	37.4	121	8.5
Other	67	100.0	59	88.1	48	71.6	39	58.2	28	41.8	8	11.9
Total	1,648	100.0	1,385	84.0	1,106	67.1	856	51.9	580	35.2	132	8.0

$$\chi^2 \text{ (5th Year)} = 26.28 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 8.92 \text{ (.025)}$$

T A B L E LXX

YEARLY RETENTION RATES BY SIZE OF MUNICIPALITIES IN WHICH STUDENTS ENROLLED IN GRADE 9

"1000 TO 1999"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	355	100.0	275	77.5	211	59.4	162	45.6	86	24.2	15	4.2
English	4,537	100.0	3,985	87.8	3,355	73.9	2,767	61.0	1,970	43.4	430	9.5
Other	187	100.0	165	88.2	138	73.8	119	63.6	81	43.3	26	13.9
Total	5,079	100.0	4,425	87.1	3,704	72.9	3,048	60.0	2,137	42.1	471	9.3

$$\chi^2 \text{ (5th Year)} = 28.90 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 14.28 \text{ (.001)}$$

TABLE LXXI

YEARLY RETENTION RATES BY SIZE OF MUNICIPALITIES IN WHICH STUDENTS ENROLLED IN GRADE 9

"2000 to 5999"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	1,054	100.0	843	80.0	574	54.5	405	38.4	194	18.4	32	3.0
English	11,748	100.0	10,245	87.2	8,581	73.0	6,997	59.6	4,915	41.8	1,257	10.7
Other	642	100.0	563	87.7	473	73.7	388	60.4	269	41.9	89	13.9
Total	13,444	100.0	11,651	86.7	9,628	71.6	7,790	57.9	5,378	40.0	1,378	10.2

$$\chi^2 (5th Year) = 133.35 (.001)$$

$$\chi^2 (Grads.) = 64.01 (.001)$$

TABLE LXXII

YEARLY RETENTION RATES BY SIZE OF MUNICIPALITIES IN WHICH STUDENTS ENROLLED IN GRADE 9

"6000 to 14999"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	478	100.0	357	74.7	270	56.5	210	43.9	103	21.5	15	3.1
English	9,584	100.0	8,394	87.6	7,140	74.5	6,019	62.8	4,275	44.6	1,153	12.0
Other	630	100.0	536	85.1	451	71.6	399	63.3	273	43.3	91	14.4
Total	10,692	100.0	9,287	86.9	7,861	73.5	6,628	62.0	4,651	43.5	1,259	11.8

$$\chi^2 \text{ (5th Year)} = 55.65 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 34.63 \text{ (.001)}$$

T A B L E LXXIII

YEARLY RETENTION RATES BY SIZE OF MUNICIPALITIES IN WHICH STUDENTS ENROLLED IN GRADE 9

"15000 TO 109999"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	1,507	100.0	1,184	78.6	855	56.7	674	44.7	447	29.7	56	3.7
English	20,894	100.0	18,747	89.7	16,078	77.0	13,904	66.5	10,031	48.0	2,783	13.3
Other	1,554	100.0	1,379	88.7	1,186	76.3	1,053	67.8	729	46.9	249	16.0
Total	23,955	100.0	21,310	89.0	18,119	75.6	15,631	65.3	11,207	46.8	3,088	12.9

$$\chi^2 (5th Year) = 101.14 (.001)$$

$$\chi^2 (Grads.) = 113.21 (.001)$$

T A B L E LXXIV

YEARLY RETENTION RATES BY SIZE OF MUNICIPALITIES IN WHICH STUDENTS ENROLLED IN GRADE 9

"110000 TO 599999"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	1,084	100.0	878	81.0	671	61.9	532	49.1	242	22.3	29	2.7
English	17,242	100.0	15,799	91.6	13,819	80.1	12,128	70.3	8,780	50.9	2,698	15.6
Other	1,338	100.0	1,208	90.3	1,051	78.6	938	70.1	661	49.4	254	19.0
Total	19,664	100.0	17,885	91.0	15,541	79.0	13,598	69.2	9,683	49.2	2,981	15.2

$$\chi^2 \text{ (5th Year)} = 169.39 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 127.06 \text{ (.001)}$$

T A B L E LXXV

YEARLY RETENTION RATES BY SIZE OF MUNICIPALITIES IN WHICH STUDENTS ENROLLED IN GRADE 9

"600000 AND OVER"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	67	100.0	51	76.1	35	52.2	32	47.8	19	28.4	3	4.5
English	6,161	100.0	5,496	89.2	4,574	74.2	3,840	62.3	2,902	47.1	1,011	16.4
Other	1,384	100.0	1,263	91.3	1,061	76.7	945	68.3	728	52.6	270	19.5
Total	7,612	100.0	6,810	89.5	5,670	74.5	4,817	63.3	3,649	47.9	1,284	16.9

$$\chi^2 \text{ (5th Year)} = 12.53 \text{ (.005)}$$

$$\chi^2 \text{ (Grads.)} = 12.59 \text{ (.005)}$$

YEARLY RETENTION RATES BY FATHERS' EDUCATION CLASSIFICATION
 "NO SECONDARY SCHOOL"

1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates			
N	%	N	%	N	%	N	%	N	%	N	%		
French	M	1,422	100.0	1,078	75.8	777	54.6	573	40.3	385	27.1	34	2.4
	F	1,519	100.0	1,194	78.6	800	52.7	572	37.7	247	16.3	41	2.7
	T	2,941	100.0	2,272	77.2	1,577	53.7	1,145	39.0	632	21.7	75	2.6
English	M	12,244	100.0	10,401	84.9	8,510	69.5	6,996	57.1	4,959	40.5	789	6.4
	F	11,918	100.0	10,218	85.7	8,091	67.9	6,325	53.1	3,679	30.9	990	8.3
	T	24,162	100.0	20,619	85.3	16,601	68.7	13,321	55.1	8,638	35.7	1,779	7.4
Other	M	1,415	100.0	1,260	89.0	1,128	79.7	1,017	71.9	772	54.6	235	16.6
	F	1,341	100.0	1,171	87.3	916	68.3	763	56.9	457	34.1	198	14.8
	T	2,756	100.0	2,431	88.2	2,044	74.0	1,780	64.4	1,229	44.4	433	15.7
Total	M	15,081	100.0	12,739	84.5	10,415	69.1	8,586	56.9	6,116	40.6	1,058	7.0
	F	14,778	100.0	12,583	85.1	9,807	66.4	7,660	51.8	4,383	29.7	1,229	8.3
	T	29,859	100.0	25,322	84.8	20,222	67.7	16,246	54.4	10,499	35.2	2,287	7.7

$$\chi^2 \text{ (5th Year)} = 228.47 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 336.29 \text{ (.001)}$$

T A B L E LXXVII

YEARLY RETENTION RATES BY FATHERS' EDUCATION CLASSIFICATION
 "PART SECONDARY SCHOOL"

1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates			
N	%	N	%	N	%	N	%	N	%	N	%		
French	M	399	100.0	320	80.2	243	60.9	187	46.9	109	27.3	20	5.0
	F	368	100.0	296	80.4	217	59.0	176	47.8	86	23.4	13	3.5
	T	767	100.0	616	80.3	460	60.0	363	47.4	195	25.4	33	4.3
English	M	10,415	100.0	9,407	90.3	8,159	78.3	7,034	67.5	5,389	51.7	1,071	10.3
	F	9,320	100.0	8,404	90.2	7,112	76.3	5,955	63.9	3,873	41.6	1,279	13.7
	T	19,735	100.0	17,811	90.3	15,271	77.3	12,989	65.7	9,262	46.7	2,350	12.0
Other	M	445	100.0	388	87.2	346	77.8	316	71.0	242	54.4	68	15.3
	F	400	100.0	347	86.8	281	70.3	236	59.0	140	35.0	53	13.3
	T	845	100.0	735	87.0	627	74.1	552	65.0	382	44.7	121	14.3
Total	M	11,259	100.0	10,115	89.8	8,748	77.7	7,537	66.9	5,740	51.0	1,159	10.3
	F	10,088	100.0	9,047	89.7	7,610	75.4	6,367	63.1	4,099	40.6	1,345	13.3
	T	21,347	100.0	19,162	89.8	16,358	76.6	13,904	65.1	9,839	46.1	2,504	11.7

 χ^2 (5th Year) = 74.25 (.001)

 χ^2 (Grads.) = 41.44 (.001)

TABLE LXXVIII

YEARLY RETENTION RATES BY FATHERS' EDUCATION CLASSIFICATION

"COMPLETE SECONDARY SCHOOL"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	188	100.0	154	81.9	114	60.6	96	51.1	60	31.9	8	4.3
	F	157	100.0	136	86.6	110	70.1	96	61.1	39	24.8	9	5.7
	T	345	100.0	290	84.3	224	65.4	192	56.1	99	28.4	17	5.0
English	M	6,236	100.0	5,832	93.5	5,333	85.5	4,849	77.8	4,000	64.1	1,032	16.5
	F	5,378	100.0	5,046	93.8	4,544	84.5	4,036	75.0	2,924	54.4	1,182	22.0
	T	11,614	100.0	10,878	93.7	9,877	85.0	8,885	76.4	6,924	59.3	2,214	19.3
Other	M	451	100.0	411	91.1	377	83.6	343	76.1	271	60.1	81	18.0
	F	383	100.0	345	90.1	273	71.3	251	65.5	161	42.0	67	17.5
	T	834	100.0	756	90.6	650	77.5	594	70.8	432	51.1	148	17.8
Total	M	6,875	100.0	6,397	93.0	5,824	84.7	5,288	76.9	4,331	63.0	1,121	16.3
	F	5,918	100.0	5,527	93.4	4,927	83.3	4,383	74.1	3,124	52.8	1,258	21.3
	T	12,793	100.0	11,924	93.2	10,751	84.0	9,671	75.6	7,455	58.3	2,379	18.6

$$\chi^2 (5th Year) = 61.39 (.001)$$

$$\chi^2 (Grads.) = 36.35 (.001)$$

YEARLY RETENTION RATES BY FATHERS' EDUCATION CLASSIFICATION

"PART UNIVERSITY"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	57	100.0	51	89.5	43	75.4	33	57.9	18	31.6	1	1.8
	F	50	100.0	43	86.0	36	72.0	31	62.0	14	28.0	3	6.0
	T	107	100.0	94	87.8	79	73.7	64	60.0	32	29.8	4	3.9
English	M	838	100.0	794	94.7	742	88.5	695	82.9	593	70.8	214	25.5
	F	707	100.0	675	95.5	612	86.6	549	77.7	425	60.1	178	25.2
	T	1,545	100.0	1,469	95.1	1,354	87.6	1,244	80.3	1,018	65.5	392	25.4
Other	M	63	100.0	60	95.2	54	85.7	53	84.1	45	71.4	20	31.7
	F	68	100.0	64	94.1	55	80.9	50	73.5	39	57.4	18	26.5
	T	131	100.0	124	94.6	109	83.3	103	78.8	84	64.4	38	29.1
Total	M	958	100.0	905	94.5	839	87.6	781	81.5	656	68.5	235	24.5
	F	825	100.0	782	94.8	703	85.2	630	76.4	478	57.9	199	24.1
	T	1,783	100.0	1,687	94.6	1,542	86.5	1,411	79.1	1,134	63.6	434	24.3

$$\chi^2 (5th Year) = 20.38 (.001)$$

$$\chi^2 (Grads.) = 20.51 (.001)$$

T A B L E LXXX

YEARLY RETENTION RATES BY FATHERS' EDUCATION CLASSIFICATION

"UNIVERSITY DEGREE"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	79	100.0	69	87.3	52	65.8	42	53.2	25	31.6	7	8.9
	F	70	100.0	60	85.7	56	80.0	54	77.1	25	35.7	8	11.4
	T	149	100.0	129	86.5	108	72.9	96	65.2	50	33.7	15	10.2
English	M	2,641	100.0	2,545	96.4	2,430	92.0	2,304	87.2	2,041	77.3	894	33.9
	F	2,201	100.0	2,136	97.0	2,031	92.3	1,911	86.8	1,622	73.7	922	41.9
	T	4,842	100.0	4,681	96.7	4,461	92.2	4,215	87.0	3,663	75.5	1,816	37.9
Other	M	150	100.0	139	92.7	132	88.0	120	80.0	105	70.0	51	34.0
	F	142	100.0	137	96.5	124	87.3	116	81.7	102	71.8	57	40.1
	T	292	100.0	276	94.6	256	87.7	236	80.9	207	70.9	108	37.1
Total	M	2,870	100.0	2,753	95.9	2,614	91.1	2,466	85.9	2,171	75.6	952	33.2
	F	2,413	100.0	2,333	96.7	2,211	91.6	2,081	86.2	1,749	72.5	987	40.9
	T	5,283	100.0	5,086	96.3	4,825	91.3	4,547	86.1	3,920	74.2	1,939	36.7

$$\chi^2 \text{ (5th Year)} = 34.97 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 29.66 \text{ (.001)}$$

T A B L E LXXXI

YEARLY RETENTION RATES BY MOTHERS' EDUCATION CLASSIFICATION
"NO SECONDARY SCHOOL"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates		
	N	%	N	%	N	%	N	%	N	%	N	%	
French	M	1,349	100.0	1,026	76.1	739	54.8	545	40.4	353	26.2	39	2.9
	F	1,471	100.0	1,147	78.0	789	53.6	558	37.9	232	15.8	31	2.1
	T	2,820	100.0	2,173	77.1	1,528	54.2	1,103	39.2	585	21.0	70	2.5
English	M	9,610	100.0	8,082	84.1	6,589	68.6	5,388	56.1	3,747	39.0	591	6.1
	F	10,305	100.0	8,695	84.4	6,742	65.4	5,191	50.4	2,864	27.8	706	6.9
	T	19,915	100.0	16,777	84.3	13,331	67.0	10,579	53.3	6,611	33.4	1,297	6.5
Other	M	1,497	100.0	1,324	88.4	1,168	78.0	1,049	70.1	789	52.7	237	15.8
	F	1,488	100.0	1,303	87.6	1,007	67.7	832	55.9	498	33.5	212	14.2
	T	2,985	100.0	2,627	88.0	2,175	72.9	1,881	63.0	1,287	43.1	449	15.0
Total	M	12,456	100.0	10,432	83.8	8,496	68.2	6,982	56.1	4,889	39.3	867	7.0
	F	13,264	100.0	11,145	84.0	8,538	64.4	6,581	49.6	3,594	27.1	949	7.2
	T	25,720	100.0	21,577	83.9	17,034	66.2	13,563	52.7	8,483	33.0	1,816	7.1

$$\chi^2 (5th Year) = 221.26 \quad (.001)$$

$$\chi^2 (Grads.) = 361.49 \quad (.001)$$

TABLE LXXXII

YEARLY RETENTION RATES BY MOTHERS' EDUCATION CLASSIFICATION

"PART SECONDARY SCHOOL"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	441	100.0	348	78.9	263	59.6	201	45.6	129	29.3	17	3.9
	F	437	100.0	350	80.1	240	54.9	194	44.4	84	19.2	15	3.4
	T	878	100.0	698	79.5	503	57.3	395	45.0	213	24.3	32	3.7
English	M	11,488	100.0	10,220	89.0	8,765	76.3	7,470	65.0	5,738	49.9	1,101	9.6
	F	11,091	100.0	9,974	89.9	8,401	75.7	6,986	63.0	4,538	40.9	1,444	13.0
	T	22,579	100.0	20,194	89.5	17,166	76.0	14,456	64.0	10,276	45.4	2,545	11.3
Other	M	449	100.0	398	88.6	362	80.6	324	72.2	249	55.5	67	14.9
	F	411	100.0	355	86.4	293	71.3	246	59.9	145	35.3	56	13.6
	T	860	100.0	753	87.5	655	76.0	570	66.1	394	45.4	123	14.3
Total	M	12,378	100.0	10,966	88.6	9,390	75.9	7,995	64.6	6,116	49.4	1,185	9.6
	F	11,939	100.0	10,679	89.4	8,934	74.8	7,426	62.2	4,767	39.9	1,515	12.7
	T	24,317	100.0	21,645	89.0	18,324	75.4	15,421	63.4	10,883	44.8	2,700	11.1

$$\chi^2 (5th Year) = 85.51 \quad (.001)$$

$$\chi^2 (Grads.) = 52.49 \quad (.001)$$

TABLE LXXXIII

YEARLY RETENTION RATES BY MOTHERS' EDUCATION CLASSIFICATION
 "COMPLETE SECONDARY SCHOOL"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	290	100.0	240	82.8	192	66.2	157	54.1	95	32.8	11	3.8
	F	255	100.0	226	88.6	179	70.2	159	62.4	73	28.6	23	9.0
	T	545	100.0	466	85.7	371	68.2	316	58.3	168	30.7	34	6.4
English	M	9,100	100.0	8,582	94.3	7,855	86.3	7,167	78.8	5,923	65.1	1,655	18.2
	F	7,752	100.0	7,326	94.5	6,661	85.9	5,952	76.8	4,406	56.8	1,904	24.6
	T	16,852	100.0	15,908	94.4	14,516	86.1	13,119	77.8	10,329	61.0	3,559	21.4
Other	M	480	100.0	442	92.1	410	85.4	384	80.0	316	65.8	107	22.3
	F	419	100.0	385	91.9	319	76.1	297	70.9	216	51.6	98	23.4
	T	899	100.0	827	92.0	729	80.8	681	75.5	532	58.7	205	22.9
Total	M	9,870	100.0	9,264	93.9	8,457	85.7	7,708	78.1	6,334	64.2	1,773	18.0
	F	8,426	100.0	7,937	94.2	7,159	85.0	6,408	76.1	4,695	55.7	2,025	24.0
	T	18,296	100.0	17,201	94.0	15,616	85.4	14,116	77.2	11,029	60.3	3,798	20.8

$$\chi^2 \text{ (5th Year)} = 81.48 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 58.22 \text{ (.001)}$$

T A B L E LXXXIV

YEARLY RETENTION RATES BY MOTHERS' EDUCATION CLASSIFICATION

"PART UNIVERSITY"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	M	28	100.0	23	82.1	21	75.0	15	53.6	9	32.1	.0
	F	11	100.0	9	81.8	9	81.8	9	81.8	6	54.5	9.1
	T	39	100.0	32	82.0	30	78.4	24	67.7	15	43.3	4.6
English	M	584	100.0	553	94.7	529	90.6	494	84.6	429	73.5	27.2
	F	514	100.0	490	95.3	461	89.7	431	83.9	356	69.3	36.2
	T	1,098	100.0	1,043	95.0	990	90.2	925	84.3	785	71.4	31.7
Other	M	43	100.0	39	90.7	38	88.4	35	81.4	32	74.4	44.2
	F	42	100.0	41	97.6	36	85.7	34	81.0	27	64.3	40.5
	T	85	100.0	80	94.2	74	87.1	69	81.2	59	69.4	42.4
Total	M	655	100.0	615	93.9	588	89.8	544	83.1	470	71.8	27.2
	F	567	100.0	540	95.2	506	89.2	474	83.6	389	68.6	36.0
	T	1,222	100.0	1,155	94.5	1,094	89.5	1,018	83.3	859	70.3	31.3

$$\chi^2 \text{ (5th Year)} = 5.86 \text{ (.10)}$$

$$\chi^2 \text{ (Grads.)} = 13.63 \text{ (.005)}$$

T A B L E LXXXV

YEARLY RETENTION RATES BY MOTHERS' EDUCATION CLASSIFICATION

"UNIVERSITY DEGREE"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	45	100.0	36	80.0	26	57.8	22	48.9	13	28.9	3	6.7
	F	34	100.0	31	91.2	26	76.5	26	76.5	17	50.0	4	11.8
	T	79	100.0	67	85.6	52	67.2	48	62.7	30	39.5	7	9.3
English	M	1,309	100.0	1,263	96.5	1,183	90.4	1,123	85.8	970	74.1	422	32.2
	F	945	100.0	920	97.4	874	92.5	814	86.1	689	72.9	412	43.6
	T	2,254	100.0	2,183	97.0	2,057	91.5	1,937	86.0	1,659	73.5	834	37.9
Other	M	43	100.0	43	100.0	40	93.0	34	79.1	29	67.4	10	23.3
	F	58	100.0	56	96.6	51	87.9	47	81.0	37	63.8	21	36.2
	T	101	100.0	99	98.3	91	90.5	81	80.1	66	65.6	31	29.8
Total	M	1,397	100.0	1,342	96.1	1,249	89.4	1,179	84.4	1,012	72.4	435	31.1
	F	1,037	100.0	1,007	97.1	951	91.7	887	85.5	743	71.6	437	42.1
	T	2,434	100.0	2,349	96.5	2,200	90.4	2,066	84.9	1,755	72.1	872	35.8

$$\chi^2 \text{ (5th Year)} = 14.10 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 17.64 \text{ (.001)}$$

T A B L E LXXXVI

YEARLY RETENTION RATES BY GEOGRAPHICAL LOCATION OF SCHOOLS IN WHICH STUDENTS WERE ORIGINALLY ENROLLED

"City A"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	569	100.0	447	78.6	330	58.0	248	43.6	133	23.4	4	.7
	F	540	100.0	448	83.0	345	63.9	282	52.2	89	16.5	16	3.0
	T	1,109	100.0	895	80.8	675	61.0	530	47.9	222	20.0	20	1.9
English	M	1,591	100.0	1,507	94.7	1,391	87.4	1,297	81.5	994	62.5	220	13.8
	F	1,496	100.0	1,416	94.7	1,301	87.0	1,155	77.2	727	48.6	256	17.1
	T	3,087	100.0	2,923	94.7	2,692	87.2	2,452	79.4	1,721	55.6	476	15.5
Other	M	61	100.0	56	91.8	50	82.0	49	80.3	39	63.9	9	14.8
	F	61	100.0	57	93.4	48	78.7	38	62.3	25	41.0	10	16.4
	T	122	100.0	113	92.6	98	80.4	87	71.3	64	52.5	19	15.6
Total	M	2,221	100.0	2,010	90.5	1,771	79.7	1,594	71.8	1,166	52.5	233	10.5
	F	2,097	100.0	1,921	91.6	1,694	80.8	1,475	70.3	841	40.1	282	13.4
	T	4,318	100.0	3,931	91.0	3,465	80.2	3,069	71.1	2,007	46.5	515	11.9

$$\chi^2 (5th Year) = 225.08 (.001)$$

$$\chi^2 (Grads.) = 128.23 (.001)$$

T A B L E LXXXVII

YEARLY RETENTION RATES BY GEOGRAPHICAL LOCATION OF SCHOOLS IN WHICH STUDENTS WERE ORIGINALLY ENROLLED

"City B"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	201	100.0	173	86.1	134	66.7	114	56.7	90	44.8	5	2.5
	F	141	100.0	116	82.3	79	56.0	58	41.1	45	31.9	3	2.1
	T	342	100.0	289	84.2	213	61.4	172	48.9	135	38.4	8	2.3
English	M	279	100.0	255	91.4	216	77.4	185	66.3	168	60.2	20	7.2
	F	260	100.0	230	88.5	202	77.7	177	68.1	151	58.1	25	9.6
	T	539	100.0	485	90.0	418	77.6	362	67.2	319	59.2	45	8.4
Other	M	10	100.0	8	80.0	8	80.0	6	60.0	5	50.0	184	.0
	F	14	100.0	12	85.7	9	64.3	6	42.9	5	35.7	5	.0
	T	24	100.0	20	82.9	17	72.2	12	51.5	10	42.9	10	.0
Total	M	490	100.0	436	89.0	358	73.1	305	62.2	263	53.7	25	5.1
	F	415	100.0	358	86.3	290	69.9	241	58.1	201	48.4	28	6.7
	T	905	100.0	794	87.7	648	71.6	546	60.3	464	51.3	53	5.9

$$\chi^2 \text{ (5th Year)} = 16.30 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 14.35 \text{ (.001)}$$

T A B L E LXXXVIII

YEARLY RETENTION RATES BY GEOGRAPHICAL LOCATION OF SCHOOLS IN WHICH STUDENTS WERE ORIGINALLY ENROLLED

"OTTAWA VALLEY"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	369	100.0	279	75.6	191	51.8	143	38.8	90	24.4	11	3.0
	F	370	100.0	315	85.1	220	59.5	171	46.2	63	17.0	11	3.0
	T	739	100.0	594	80.4	411	55.7	314	42.5	153	20.7	22	3.0
English	M	794	100.0	666	83.9	572	72.0	477	60.1	353	44.5	64	8.1
	F	726	100.0	646	89.0	546	75.2	457	62.9	266	36.6	73	10.1
	T	1,520	100.0	1,312	86.5	1,118	73.6	934	61.5	619	40.6	137	9.1
Other	M	17	100.0	16	94.1	12	70.6	10	58.8	6	35.3	1	5.9
	F	19	100.0	16	84.2	10	52.6	8	42.1	4	21.1	2	10.5
	T	36	100.0	32	89.2	22	61.6	18	50.5	10	28.2	3	8.2
Total	M	1,180	100.0	961	81.4	775	65.7	630	53.4	449	38.1	76	6.4
	F	1,115	100.0	977	87.6	776	69.6	636	57.0	333	29.9	86	7.7
	T	2,295	100.0	1,938	84.4	1,551	67.6	1,266	55.2	782	34.1	162	7.1

$$\chi^2 \text{ (5th Year)} = 58.91 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 25.75 \text{ (.001)}$$

T A B L E LXXXIX

YEARLY RETENTION RATES BY GEOGRAPHICAL LOCATION OF SCHOOLS IN WHICH STUDENTS WERE ORIGINALLY ENROLLED
"NORTHERN ONTARIO"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	869	100.0	670	77.1	490	56.4	362	41.7	225	25.9	33	3.8
	F	984	100.0	712	75.1	471	49.7	343	36.2	155	16.4	25	2.6
	T	1,853	100.0	1,382	76.1	961	53.1	705	39.0	380	21.2	58	3.2
English	M	4,484	100.0	3,938	87.8	3,342	74.5	2,889	64.4	2,167	48.3	438	9.8
	F	4,136	100.0	3,622	87.6	2,985	72.2	2,464	59.6	1,518	36.7	505	12.2
	T	8,620	100.0	7,560	87.7	6,327	73.4	5,353	62.0	3,685	42.5	943	11.0
Other	M	360	100.0	326	90.6	290	80.6	262	72.8	197	54.7	63	17.5
	F	387	100.0	350	90.4	282	72.9	244	63.0	144	37.2	62	16.0
	T	747	100.0	676	90.5	572	76.8	506	67.9	341	46.0	125	16.8
Total	M	5,713	100.0	4,934	86.4	4,122	72.2	3,513	61.5	2,589	45.3	534	9.3
	F	5,507	100.0	4,684	85.1	3,738	67.9	3,051	55.4	1,817	33.0	592	10.7
	T	11,220	100.0	9,618	85.7	7,860	70.1	6,564	58.5	4,406	39.3	1,126	10.0

$$\chi^2 \text{ (5th Year)} = 200.43 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 128.46 \text{ (.001)}$$

T A B L E X C

YEARLY RETENTION RATES BY GEOGRAPHICAL LOCATION OF SCHOOLS IN WHICH STUDENTS WERE ORIGINALLY ENROLLED

"REST OF ONTARIO"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates		
	N	%	N	%	N	%	N	%	N	%	N	%	
French	M	427	100.0	343	80.3	264	61.8	200	46.8	137	32.1	24	5.6
	F	416	100.0	329	79.1	233	56.0	174	41.8	94	22.6	23	5.5
	T	843	100.0	672	79.7	497	58.9	374	44.3	231	27.4	47	5.6
English	M	30,047	100.0	26,797	89.2	23,177	77.1	20,004	66.6	15,510	51.6	3,652	12.2
	F	28,006	100.0	24,966	89.1	20,911	74.1	17,415	62.2	11,611	41.5	4,212	15.0
	T	58,053	100.0	51,763	89.2	44,088	75.6	37,419	64.4	27,121	46.6	7,864	13.6
Other	M	2,556	100.0	2,287	89.5	2,057	80.5	1,860	72.8	1,448	56.7	452	17.7
	F	2,346	100.0	2,066	88.1	1,652	70.4	1,408	60.0	901	38.4	388	16.5
	T	4,902	100.0	4,353	88.8	3,709	75.5	3,268	66.4	2,349	47.6	840	17.1
Total	M	33,030	100.0	29,427	89.1	25,498	77.2	22,064	66.8	17,095	51.8	4,128	12.5
	F	30,768	100.0	27,361	88.9	22,796	74.1	18,997	61.7	12,606	41.0	4,623	15.0
	T	63,798	100.0	56,788	89.0	48,294	75.7	41,061	64.4	29,701	46.6	8,751	13.7

$$\chi^2 \text{ (5th Year)} = 68.70 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 83.74 \text{ (.001)}$$

T A B L E XCI

YEARLY RETENTION RATES BY NUMBER OF CHILDREN IN STUDENTS' FAMILIES

"ONE CHILD"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	90	100.0	74	82.2	63	70.0	48	53.3	34	37.8	5	5.6
	F	111	100.0	93	83.8	64	57.7	52	46.8	22	19.8	6	5.4
	T	201	100.0	167	83.0	127	63.9	100	50.1	56	28.8	11	5.5
English	M	3,364	100.0	3,070	91.3	2,706	80.4	2,377	70.7	1,875	55.7	414	12.3
	F	2,854	100.0	2,612	91.5	2,241	78.5	1,929	67.6	1,322	46.3	485	17.0
	T	6,218	100.0	5,682	91.4	4,947	79.5	4,306	69.2	3,197	51.0	899	14.7
Other	M	374	100.0	343	91.7	317	84.8	298	79.7	245	65.5	74	19.8
	F	328	100.0	302	92.1	251	76.5	227	69.2	163	49.7	82	25.0
	T	702	100.0	645	91.9	568	80.7	525	74.5	408	57.6	156	22.4
Total	M	3,828	100.0	3,487	91.1	3,086	80.6	2,723	71.1	2,154	56.3	493	12.9
	F	3,293	100.0	3,007	91.3	2,556	77.6	2,208	67.1	1,507	45.8	573	17.4
	T	7,121	100.0	6,494	91.2	5,642	79.2	4,931	69.2	3,661	51.4	1,066	15.0

$$\chi^2 \text{ (5th Year)} = 27.83 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 37.86 \text{ (.001)}$$

T A B L E X C I I

YEARLY RETENTION RATES BY NUMBER OF CHILDREN IN STUDENTS' FAMILIES

"TWO CHILDREN"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	221	100.0	184	83.3	145	65.6	111	50.2	69	31.2	9	4.1
	F	221	100.0	189	85.5	147	66.5	124	56.1	55	24.9	9	4.1
	T	442	100.0	373	84.4	292	66.1	235	53.2	124	28.1	18	4.1
English	M	9,347	100.0	8,691	93.0	7,784	83.3	6,974	74.6	5,647	60.4	1,413	15.1
	F	8,450	100.0	7,875	93.2	6,901	81.7	5,994	70.9	4,138	49.0	1,616	19.1
	T	17,797	100.0	16,566	93.1	14,685	82.5	12,968	72.8	9,785	54.7	3,029	17.1
Other	M	826	100.0	778	94.2	718	86.9	657	79.5	541	65.5	185	22.4
	F	811	100.0	742	91.5	623	76.8	535	66.0	354	43.6	154	19.0
	T	1,637	100.0	1,520	92.9	1,341	81.9	1,192	72.8	895	54.6	339	20.7
Total	M	10,394	100.0	9,653	92.9	8,647	83.2	7,742	74.5	6,257	60.2	1,607	15.5
	F	9,482	100.0	8,806	92.9	7,671	80.9	6,653	70.2	4,547	48.0	1,779	18.8
	T	19,876	100.0	18,459	92.9	16,318	82.1	14,395	72.4	10,804	54.4	3,386	17.0

$$\chi^2 \text{ (5th Year)} = 57.55 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 56.57 \text{ (.001)}$$

T A B L E XCIII

YEARLY RETENTION RATES BY NUMBER OF CHILDREN IN STUDENTS' FAMILIES

"THREE CHILDREN"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	330	100.0	269	81.5	206	62.4	169	51.2	106	32.1	15	4.5
	F	315	100.0	257	81.6	199	63.2	162	51.4	75	23.8	21	6.7
	T	645	100.0	526	81.6	405	62.8	331	51.3	181	28.0	36	5.6
English	M	8,681	100.0	7,949	91.6	7,095	81.7	6,262	72.1	4,949	57.0	1,266	14.6
	F	7,998	100.0	7,336	91.7	6,305	78.8	5,426	67.8	3,711	46.4	1,428	17.9
	T	16,679	100.0	15,285	91.7	13,400	80.3	11,688	70.0	8,660	51.7	2,694	16.3
Other	M	688	100.0	623	90.6	557	81.0	505	73.4	395	57.4	109	15.8
	F	637	100.0	580	91.1	481	75.5	418	65.6	257	40.3	114	17.9
	T	1,325	100.0	1,203	90.9	1,038	78.3	923	69.5	652	48.9	223	16.9
Total	M	9,699	100.0	8,841	91.2	7,858	81.0	6,936	71.5	5,450	56.2	1,390	14.3
	F	8,950	100.0	8,173	91.3	6,985	78.0	6,006	67.1	4,043	45.2	1,563	17.5
	T	18,649	100.0	17,014	91.2	14,843	79.6	12,942	69.4	9,493	50.9	2,953	15.8

χ^2 (5th Year) = 70.25 (.001)

χ^2 (Grads.) = 44.71 (.001)

T A B L E X C I V

YEARLY RETENTION RATES BY NUMBER OF CHILDREN IN STUDENTS' FAMILIES

"FOUR CHILDREN"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	363	100.0	302	83.2	229	63.1	183	50.4	120	33.1	12	3.3
	F	357	100.0	291	81.5	215	60.2	174	48.7	78	21.8	8	2.2
	T	720	100.0	593	82.4	444	61.7	357	49.6	198	27.5	20	2.8
English	M	6,206	100.0	5,490	88.5	4,761	76.7	4,084	65.8	3,111	50.1	715	11.5
	F	5,699	100.0	5,103	89.5	4,312	75.7	3,587	62.9	2,310	40.5	775	13.6
	T	11,905	100.0	10,593	89.0	9,073	76.2	7,671	64.4	5,421	45.3	1,490	12.6
Other	M	409	100.0	357	87.3	317	77.5	288	70.4	208	50.9	59	14.4
	F	382	100.0	326	85.3	247	64.7	207	54.2	126	33.0	51	13.4
	T	791	100.0	683	86.3	564	71.1	495	62.3	334	42.0	110	13.9
Total	M	6,978	100.0	6,149	88.1	5,307	76.1	4,555	65.3	3,439	49.3	786	11.3
	F	6,438	100.0	5,720	88.8	4,774	74.2	3,968	61.6	2,514	39.0	834	13.0
	T	13,416	100.0	11,869	88.5	10,081	75.1	8,523	63.5	5,953	44.4	1,620	12.1

$$\chi^2 \text{ (5th Year)} = 50.64 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 55.65 \text{ (.001)}$$

T A B L E XCV

YEARLY RETENTION RATES BY NUMBER OF CHILDREN IN STUDENTS' FAMILIES
"FIVE OR MORE CHILDREN"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	1,392	100.0	1,056	75.9	752	54.0	548	39.4	342	24.6	36	2.6
	F	1,378	100.0	1,068	77.5	710	51.5	509	36.9	212	15.4	34	2.5
	T	2,770	100.0	2,124	76.7	1,462	52.8	1,057	38.2	554	20.0	70	2.6
English	M	9,190	100.0	7,637	83.1	6,087	66.2	4,932	53.7	3,440	37.4	564	6.1
	F	9,303	100.0	7,695	82.7	5,992	64.4	4,574	49.2	2,707	29.1	745	8.0
	T	18,493	100.0	15,332	82.9	12,079	65.3	9,506	51.5	6,147	33.3	1,309	7.1
Other	M	677	100.0	569	84.0	490	72.4	423	62.5	295	43.6	94	13.9
	F	640	100.0	529	82.7	381	59.5	300	46.9	167	26.1	58	9.1
	T	1,317	100.0	1,098	83.4	871	66.0	723	54.7	462	34.9	152	11.5
Total	M	11,259	100.0	9,262	82.3	7,329	65.1	5,903	52.4	4,077	36.2	694	6.2
	F	11,321	100.0	9,292	82.1	7,083	62.6	5,383	47.5	3,086	27.3	837	7.4
	T	22,580	100.0	18,554	82.2	14,412	63.8	11,286	50.0	7,163	31.7	1,531	6.8

$$\chi^2 \text{ (5th Year)} = 138.09 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 120.36 \text{ (.001)}$$

T A B L E XCVI

MEAN SCORES AND STANDARD DEVIATIONS ON CAAT'S I, II, AND III BY LANGUAGE GROUPS

"1st YEAR"

		CAAT I			CAAT II			CAAT III		
		N	\bar{M}	SD	N	\bar{M}	SD	N	\bar{M}	SD
French	M	2,178	17.8	7.90	2,187	10.8	4.28	2,165	26.6	9.08
	F	2,295	17.5	7.70	2,293	9.4	4.15	2,289	26.6	8.40
English	M	34,955	28.0	8.59	34,872	15.4	4.85	34,793	31.1	7.29
	F	33,563	26.9	8.92	33,567	13.7	4.62	33,469	30.6	7.04
Other	M	2,817	25.8	8.43	2,826	15.1	4.62	2,826	31.2	7.46
	F	2,755	24.7	8.63	2,758	13.3	4.63	2,757	30.4	7.51

TABLE XCVII

MEAN SCORES AND STANDARD DEVIATIONS ON CAAT'S I, II, AND III BY LANGUAGE GROUPS

"2nd YEAR"

		CAAT I			CAAT II			CAAT III		
		N	\bar{M}	SD	N	\bar{M}	SD	N	\bar{M}	SD
French	M	1,722	18.7	7.80	1,727	11.2	4.30	1,713	27.7	8.47
	F	1,820	18.1	7.92	1,820	9.8	3.99	1,814	27.3	8.11
English	M	31,478	28.6	8.56	31,413	15.8	4.49	31,364	31.5	7.25
	F	29,968	27.7	8.60	29,957	14.1	4.39	29,900	31.1	6.77
Other	M	2,553	26.3	8.49	2,554	15.3	4.77	2,559	31.7	6.78
	F	2,440	25.4	8.47	2,442	13.6	4.63	2,444	31.0	6.92

T A B L E XCVIII

MEAN SCORES AND STANDARD DEVIATIONS ON CAAT'S I, II, AND III BY LANGUAGE GROUPS

"3rd YEAR"

		CAAT I			CAAT II			CAAT III		
		N	\bar{M}	SD	N	\bar{M}	SD	N	\bar{M}	SD
French	M	1,280	19.4	7.99	1,281	11.4	4.49	1,270	28.1	8.15
	F	1,261	19.2	7.94	1,270	10.1	4.20	1,261	28.5	7.17
English	M	27,329	29.4	8.19	27,267	16.1	4.66	27,221	32.0	6.88
	F	25,132	28.6	8.55	25,092	14.5	4.44	25,069	31.7	6.24
Other	M	2,283	26.9	8.41	2,286	15.6	4.63	2,288	32.0	6.65
	F	1,944	26.6	8.35	1,945	14.1	4.38	1,948	31.6	6.53

T A B L E XCIX

MEAN SCORES AND STANDARD DEVIATIONS ON CAAT'S I, II, AND III BY LANGUAGE GROUPS

"4th YEAR"

		CAAT I			CAAT II			CAAT III		
		N	\bar{M}	SD	N	\bar{M}	SD	N	\bar{M}	SD
French	M	900	20.1	8.01	901	11.7	4.34	890	28.8	7.78
	F	782	19.6	7.77	786	10.3	4.22	782	28.8	6.84
English	M	23,037	30.1	7.99	22,974	16.5	4.37	22,952	32.4	6.64
	F	19,647	29.6	8.31	19,629	15.0	4.28	19,595	32.2	6.09
Other	M	1,976	27.4	8.27	1,976	15.8	4.65	1,974	32.2	6.74
	F	1,498	27.6	8.32	1,498	14.5	4.51	1,502	32.2	6.17

TABLE C

MEAN SCORES AND STANDARD DEVIATIONS ON CAAT'S I, II, AND III BY LANGUAGE GROUPS
 "5th YEAR"

		CAAT I			CAAT II			CAAT III		
		N	\bar{M}	SD	N	\bar{M}	SD	N	\bar{M}	SD
French	M	536	20.9	8.13	537	12.0	4.47	530	29.0	7.93
	F	339	21.0	7.82	340	11.0	4.35	338	28.9	7.19
English	M	17,050	31.1	7.85	17,004	17.0	4.29	16,988	33.0	6.02
	F	12,107	31.2	8.21	12,098	15.7	4.36	12,093	32.9	5.91
Other	M	1,474	28.5	7.92	1,476	16.3	4.40	1,472	32.7	6.32
	F	933	29.1	8.35	931	15.2	4.51	934	32.8	6.05

T A B L E C I

MEAN SCORES AND STANDARD DEVIATIONS ON CEAT'S I, II, AND III BY LANGUAGE GROUPS

"1st YEAR"

		CEAT I			CEAT II			CEAT III		
		N	\bar{M}	S.D.	N	\bar{M}	S.D.	N	\bar{M}	S.D.
French	M	2,070	12.3	3.96	2,054	52.0	16.06	2,043	17.0	5.73
	F	2,249	12.0	3.83	2,243	57.2	16.62	2,243	17.5	5.39
English	M	34,562	16.5	4.30	34,510	66.1	16.98	34,452	22.3	6.40
	F	33,282	16.1	4.20	33,173	71.5	16.43	33,147	22.3	6.17
Other	M	2,800	16.2	4.21	2,786	67.0	17.21	2,801	21.4	6.15
	F	2,727	15.7	4.34	2,728	72.1	16.94	2,700	21.2	6.31

T A B L E C I I

MEAN SCORES AND STANDARD DEVIATIONS ON CEAT'S I, II, AND III BY LANGUAGE GROUPS

"2nd YEAR"

		CEAT I			CEAT II			CEAT III		
		N	\bar{M}	S.D.	N	\bar{M}	S.D.	N	\bar{M}	S.D.
French	M	1,626	12.6	4.21	1,622	54.0	15.88	1,613	17.6	5.83
	F	1,792	12.2	4.01	1,799	58.6	16.48	1,802	18.0	5.44
English	M	31,257	16.8	4.06	31,192	67.3	16.63	31,180	22.7	6.38
	F	29,782	16.4	4.01	29,686	72.8	16.10	29,675	22.7	6.31
Other	M	2,540	16.4	4.28	2,533	68.1	16.80	2,544	21.8	5.98
	F	2,424	16.0	4.20	2,426	73.4	16.12	2,396	21.7	5.91

TABLE CIII

MEAN SCORES AND STANDARD DEVIATIONS ON CEAT'S I, II, AND III BY LANGUAGE GROUPS

"3rd YEAR"

		CEAT I			CEAT II			CEAT III		
		N	\bar{M}	S.D.	N	\bar{M}	S.D.	N	\bar{M}	S.D.
French	M	1,264	12.9	4.23	1,259	55.3	15.99	1,252	18.2	5.74
	F	1,255	12.7	3.94	1,259	60.9	16.10	1,258	18.8	5.58
English	M	27,152	17.1	4.07	27,113	68.7	16.11	27,090	23.2	6.32
	F	24,994	16.7	4.20	24,908	74.5	15.60	24,897	23.3	6.17
Other	M	2,275	16.7	4.07	2,270	69.5	15.81	2,281	22.2	5.77
	F	1,936	16.4	4.23	1,937	75.2	15.92	1,910	22.3	6.14

T A B L E C I V

MEAN SCORES AND STANDARD DEVIATIONS ON CEAT'S I, II, AND III BY LANGUAGE GROUPS

"4th YEAR"

		CEAT I			CEAT II			CEAT III		
		N	\bar{M}	S.D.	N	\bar{M}	S.D.	N	\bar{M}	S.D.
French	M	890	13.2	4.05	887	56.4	16.02	875	18.7	5.62
	F	781	12.9	3.99	780	61.9	15.54	781	19.3	5.57
English	M	22,891	17.4	3.97	22,868	69.9	16.02	22,847	23.7	6.03
	F	19,537	17.1	4.17	19,479	76.2	15.37	19,487	24.0	5.81
Other	M	1,968	16.9	4.01	1,959	70.3	16.02	1,970	22.4	5.97
	F	1,491	16.8	4.21	1,486	77.2	15.12	1,469	23.0	6.00

T A B L E C V

MEAN SCORES AND STANDARD DEVIATIONS ON CEAT'S I, II, AND III BY LANGUAGE GROUPS

"5th YEAR"

		CEAT I			CEAT II			CEAT III		
		N	\bar{M}	S.D.	N	\bar{M}	S.D.	N	\bar{M}	S.D.
French	M	534	13.6	3.96	529	57.6	15.56	524	19.4	5.74
	F	340	13.3	4.18	338	64.5	15.60	339	20.1	5.39
English	M	16,590	17.8	3.99	16,936	71.8	15.65	16,906	24.3	6.19
	F	12,062	17.7	4.31	12,011	79.0	14.82	12,028	25.0	5.88
Other	M	1,471	17.3	4.22	1,462	72.2	15.54	1,470	23.1	5.92
	F	925	17.3	4.23	925	80.3	14.69	914	24.0	5.84

T A B L E C V I

MEAN SCORES AND STANDARD DEVIATIONS ON CMAT'S I, II, AND III BY LANGUAGE GROUPS

"1st YEAR"

		CMAT I			CMAT II			CMAT III		
		N	\bar{M}	S.D.	N	\bar{M}	S.D.	N	\bar{M}	S.D.
French	M	2,050	17.4	4.81	2,050	20.0	5.61	2,055	13.6	5.45
	F	2,243	18.5	4.66	2,244	19.1	5.05	2,224	12.1	5.56
English	M	34,368	19.1	4.48	34,440	26.0	5.11	34,343	17.2	4.87
	F	33,093	20.0	4.28	33,133	24.3	4.98	33,049	15.8	5.36
Other	M	2,793	19.9	4.27	2,799	25.6	5.50	2,799	17.7	4.82
	F	2,713	20.4	4.20	2,714	23.8	5.22	2,705	16.2	5.22

T A B L E C V I I

MEAN SCORES AND STANDARD DEVIATIONS ON CMAT'S I, II, AND III BY LANGUAGE GROUPS

"2nd YEAR"

		CMAT I			CMAT II			CMAT III		
		N	\bar{M}	S.D.	N	\bar{M}	S.D.	N	\bar{M}	S.D.
French	M	1,619	17.9	4.43	1,610	20.6	5.49	1,615	14.2	5.26
	F	1,795	18.8	4.57	1,797	19.5	5.04	1,786	12.5	5.57
English	M	31,133	19.3	4.64	31,168	26.4	4.91	31,121	17.5	4.74
	F	29,671	20.3	4.04	29,670	24.7	5.12	29,621	16.2	5.31
Other	M	2,536	20.1	4.39	2,540	26.0	5.31	2,540	18.0	4.66
	F	2,406	20.7	4.00	2,412	24.2	5.37	2,404	16.6	5.15

TABLE CVIII

MEAN SCORES AND STANDARD DEVIATIONS ON CMAT'S I, II, AND III BY LANGUAGE GROUPS

"3rd YEAR"

		CMAT I			CMAT II			CMAT III		
		N	\bar{M}	S.D.	N	\bar{M}	S.D.	N	\bar{M}	S.D.
French	M	1,262	18.1	4.45	1,252	21.0	5.47	1,261	14.4	5.20
	F	1,260	19.2	4.44	1,264	20.2	4.98	1,255	13.2	5.41
English	M	27,075	19.6	4.52	27,078	26.8	5.16	27,043	17.9	4.53
	F	24,913	20.6	3.81	24,895	25.3	4.80	24,864	16.7	5.23
Other	M	2,275	20.4	4.09	2,277	26.4	5.07	2,276	18.3	4.37
	F	1,925	21.0	3.91	1,924	24.9	5.02	1,919	17.2	4.81

T A B L E C I X

MEAN SCORES AND STANDARD DEVIATIONS ON CMAT'S I, II, AND III BY LANGUAGE GROUPS

"4th YEAR"

		CMAT I			CMAT II			CMAT III		
		N	\bar{M}	S.D.	N	\bar{M}	S.D.	N	\bar{M}	S.D.
French	M	881	18.4	4.52	878	21.5	5.10	884	14.7	5.22
	F	783	19.3	4.64						
English	M	22,833	19.9	4.25	22,821	27.3	4.54	22,813	18.2	4.47
	F	19,461	20.8	4.09						
Other	M	1,966	20.6	3.78	1,967	26.7	4.92	1,965	18.4	4.48
	F	1,482	21.3	3.89						
					19,452	25.8	5.09	19,433	17.2	5.05
					1,481	25.5	4.73	1,476	17.7	4.70

TABLE CX

MEAN SCORES AND STANDARD DEVIATIONS ON CMAT'S I, II, AND III BY LANGUAGE GROUPS

"5th YEAR"

		CMAT I			CMAT II			CMAT III		
		N	\bar{M}	S.D.	N	\bar{M}	S.D.	N	\bar{M}	S.D.
French	M	530	18.5	4.57	523	21.7	5.63	531	14.6	5.28
	F	339	19.5	4.29	336	21.3	4.97	334	14.1	5.51
English	M	16,899	20.3	3.94	16,903	27.8	4.81	16,903	18.7	4.09
	F	11,997	21.2	3.90	11,989	26.7	5.01	11,994	18.0	4.70
Other	M	1,466	20.8	4.09	1,465	27.2	5.01	1,461	18.9	4.18
	F	923	21.7	3.85	924	26.2	4.82	919	18.2	4.79

TABLE CXI

YEARLY RETENTION RATES BY CAAT I

"FIRST QUARTILE"

1st Year			2nd Year			3rd Year			4th Year			5th Year			Graduates		
	N	%		N	%		N	%		N	%		N	%		N	%
French	M	89	100.0	83	93.3	74	83.1	70	78.7	46	51.7	16	18.0				
	F	78	100.0	73	93.6	70	89.7	65	83.3	24	30.8	11	14.1				
	T	167	100.0	156	93.5	144	86.4	135	81.0	70	41.3	27	16.1				
English	M	9,813	100.0	9,525	97.1	9,066	92.4	8,555	87.2	7,349	74.9	3,116	31.8				
	F	8,349	100.0	8,161	97.7	7,706	92.3	7,191	86.1	5,655	67.7	3,285	39.3				
	T	18,162	100.0	17,686	97.4	16,772	92.4	15,746	86.7	13,004	71.3	6,401	35.6				
Other	M	568	100.0	554	97.5	539	94.9	510	89.8	456	80.3	246	43.3				
	F	486	100.0	474	97.5	448	92.2	425	87.4	335	68.9	217	44.7				
	T	1,054	100.0	1,028	97.5	987	93.6	935	88.6	791	74.6	463	44.0				
Total	M	10,470	100.0	10,162	97.1	9,679	92.4	9,135	87.2	7,851	75.0	3,378	32.3				
	F	8,913	100.0	8,708	97.7	8,224	92.3	7,681	86.2	6,014	67.5	3,513	39.4				
	T	19,383	100.0	18,870	97.4	17,903	92.4	16,816	86.8	13,865	71.5	6,891	35.6				

$$\chi^2 \text{ (5th Year)} = 22.30 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 38.93 \text{ (.001)}$$

TABLE CXII

YEARLY RETENTION RATES BY CAAT II

"FIRST QUARTILE"

1st Year			2nd Year			3rd Year			4th Year			5th Year			Graduates		
	N	%	N	%		N	%		N	%		N	%		N	%	
French	M	149	100.0	134	89.9	109	73.2	95	63.8	63	42.3	22	14.8				
	F	77	100.0	70	90.9	61	79.2	59	76.6	25	32.5	11	14.3				
	T	226	100.0	204	90.4	170	76.2	154	70.2	88	37.4	33	14.6				
English	M	12,257	100.0	11,789	96.2	11,079	90.4	10,319	84.2	8,678	70.8	3,288	26.8				
	F	7,282	100.0	7,076	97.2	6,646	91.3	6,215	85.3	4,819	66.2	2,801	38.5				
	T	19,539	100.0	18,865	96.7	17,725	90.9	16,534	84.8	13,497	68.5	6,089	32.7				
Other	M	923	100.0	887	96.1	843	91.3	785	85.0	669	72.5	326	35.3				
	F	533	100.0	504	94.6	453	85.0	419	78.6	324	60.8	214	40.2				
	T	1,456	100.0	1,391	95.4	1,296	88.2	1,204	81.8	993	66.7	540	37.8				
Total	M	13,329	100.0	12,810	96.1	12,031	90.3	11,199	84.0	9,410	70.6	3,636	27.3				
	F	7,892	100.0	7,650	96.9	7,160	90.7	6,693	84.8	5,168	65.5	3,026	38.3				
	T	21,221	100.0	20,460	96.4	19,191	90.4	17,892	84.3	14,578	68.7	6,662	31.4				

$$\chi^2 \text{ (5th Year)} = 29.59 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 35.66 \text{ (.001)}$$

TABLE CXIII

YEARLY RETENTION RATES BY CAAT III

"FIRST QUARTILE"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	294	100.0	263	89.5	206	70.1	179	60.9	117	39.8	30	10.2
	F	258	100.0	226	87.6	186	72.1	151	58.5	61	23.6	20	7.8
	T	552	100.0	489	88.6	392	71.1	330	59.7	178	31.7	50	9.0
English	M	10,468	100.0	10,002	95.5	9,309	88.9	8,576	81.9	7,112	67.9	2,520	24.1
	F	8,491	100.0	8,135	95.8	7,411	87.3	6,693	78.8	4,943	58.2	2,495	29.4
	T	18,959	100.0	18,137	95.7	16,720	88.1	15,269	80.4	12,055	63.1	5,015	26.3
Other	M	883	100.0	847	95.9	797	90.3	741	83.9	614	69.5	264	29.9
	F	744	100.0	707	95.0	619	83.2	567	76.2	412	55.4	222	29.8
	T	1,627	100.0	1,554	95.5	1,416	86.8	1,308	80.1	1,026	62.5	486	29.9
Total	M	11,645	100.0	11,112	95.4	10,312	88.6	9,496	81.5	7,843	67.4	2,814	24.2
	F	9,493	100.0	9,068	95.5	8,216	86.5	7,411	78.1	5,416	57.1	2,737	28.8
	T	21,138	100.0	20,180	95.5	18,528	87.7	16,907	80.0	13,259	62.7	5,551	26.5

$$\chi^2 \text{ (5th Year)} = 84.01 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 70.54 \text{ (.001)}$$

T A B L E CXIV

YEARLY RETENTION RATES BY CAAT I

"SECOND QUARTILE"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates		
	N	%	N	%	N	%	N	%	N	%	N	%	
French	M	235	100.0	216	91.9	1,187	79.6	167	71.1	106	45.1	17	7.2
	F	228	100.0	204	89.5	168	73.7	144	63.2	73	32.0	19	8.3
	T	463	100.0	420	90.7	355	76.7	311	67.2	179	38.6	36	7.8
English	M	10,007	100.0	9,367	93.6	8,449	84.4	7,490	74.8	5,800	58.0	929	9.3
	F	8,720	100.0	8,232	94.4	7,232	82.9	6,228	71.4	4,077	46.8	1,248	14.3
	T	18,727	100.0	17,599	94.0	15,681	83.7	13,718	73.1	9,877	52.4	2,177	11.6
Other	M	766	100.0	731	95.4	683	89.2	633	82.6	504	65.8	165	21.5
	F	633	100.0	592	93.5	513	81.0	457	72.2	305	47.9	144	22.7
	T	1,399	100.0	1,323	94.5	1,196	85.1	1,090	77.4	807	56.9	309	22.1
Total	M	11,008	100.0	10,314	93.7	9,319	84.7	8,290	75.3	6,410	58.2	1,111	10.1
	F	9,581	100.0	9,028	94.2	7,913	82.6	6,829	71.3	4,453	46.5	1,411	14.7
	T	20,589	100.0	19,342	93.9	17,232	83.7	15,119	73.4	10,863	52.8	2,522	12.2

$$\chi^2 \text{ (5th Year)} = 23.87 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 118.11 \text{ (.001)}$$

TABLE CXV

YEARLY RETENTION RATES BY CAAT II

"SECOND QUARTILE"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	293	100.0	262	89.4	213	72.7	177	60.4	111	37.9	20	6.8
	F	208	100.0	190	91.3	148	71.2	122	58.7	58	27.9	24	11.5
	T	501	100.0	452	90.4	361	72.0	299	59.6	169	32.9	44	9.2
English	M	8,245	100.0	7,605	92.2	6,777	82.2	5,926	71.9	4,543	55.1	696	8.4
	F	7,484	100.0	7,029	93.9	6,182	82.6	5,349	71.5	3,616	48.3	1,263	16.9
	T	15,729	100.0	14,634	93.1	12,959	82.4	11,275	71.7	8,159	51.7	1,959	12.7
Other	M	623	100.0	567	91.0	521	83.6	486	78.0	373	59.9	102	16.4
	F	606	100.0	573	94.6	487	80.4	429	70.8	278	45.9	122	20.1
	T	1,229	100.0	1,140	92.8	1,008	82.0	915	74.4	651	52.9	224	18.3
Total	M	9,161	100.0	8,434	92.1	7,511	82.0	6,589	71.9	5,027	54.9	818	8.9
	F	8,298	100.0	7,792	93.9	6,817	82.2	5,900	71.1	3,952	47.6	1,409	17.0
	T	17,459	100.0	16,226	92.9	14,328	82.1	12,489	71.5	8,979	51.4	2,227	12.8

$$\chi^2 (5th Year) = 31.67 (.001)$$

$$\chi^2 (Grads.) = 36.15 (.001)$$

TABLE CXVI

YEARLY RETENTION RATES BY CAAT III

"SECOND QUARTILE"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	372	100.0	325	87.4	250	67.2	207	55.6	129	34.7	14	3.8
	F	385	100.0	331	86.0	253	65.7	198	51.4	91	23.6	16	4.2
	T	757	100.0	656	86.7	503	66.5	405	53.5	220	29.2	30	4.0
English	M	7,649	100.0	7,122	93.1	6,385	83.5	5,699	74.5	4,492	58.7	1,022	13.4
	F	7,405	100.0	6,906	93.3	6,097	82.3	5,302	71.6	3,606	48.7	1,298	17.5
	T	15,054	100.0	14,028	93.2	12,482	82.9	11,001	73.1	8,098	53.7	2,320	15.5
Other	M	611	100.0	562	92.0	513	84.0	470	76.9	378	61.9	122	20.0
	F	567	100.0	517	91.2	432	76.2	370	65.3	235	41.4	111	19.6
	T	1,178	100.0	1,079	91.6	945	80.1	840	71.1	613	51.7	233	19.8
Total	M	8,632	100.0	8,009	92.8	7,148	82.8	6,376	73.9	4,999	57.9	1,158	13.4
	F	8,357	100.0	7,754	92.8	6,782	81.2	5,870	70.2	3,932	47.1	1,425	17.1
	T	16,989	100.0	15,763	92.8	13,930	82.0	12,246	72.1	8,931	52.6	2,583	15.2

$$\chi^2 \text{ (5th Year)} = 83.92 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 79.56 \text{ (.001)}$$

T A B L E C X V I I I

YEARLY RETENTION RATES BY CAAT I

"THIRD QUARTILE"

		1st Year			2nd Year			3rd Year			4th Year			5th Year			Graduates		
		N	%		N	%		N	%		N	%		N	%		N	%	
French	M	490	100.0		424	86.5		321	65.5		265	54.1		178	36.3		25	5.1	
	F	551	100.0		472	85.7		355	64.4		294	53.4		133	24.1		26	4.7	
	T	1,041	100.0		896	86.1		676	65.0		559	53.8		311	30.2		51	4.9	
English	M	9,091	100.0		8,022	88.2		6,713	73.8		5,511	60.6		3,923	43.5		261	2.9	
	F	9,203	100.0		8,113	88.2		6,572	71.4		5,195	56.4		2,961	32.2		403	4.4	
	T	18,294	100.0		16,135	88.2		13,285	72.6		10,706	58.5		6,884	37.7		664	3.7	
Other	M	783	100.0		701	89.5		618	78.9		558	71.3		418	53.4		76	9.7	
	F	829	100.0		735	88.7		582	70.2		489	59.0		278	33.5		74	8.9	
	T	1,612	100.0		1,436	89.1		1,200	74.6		1,047	65.2		696	43.5		150	9.3	
Total	M	10,364	100.0		9,147	88.3		7,652	73.8		6,334	61.1		4,519	43.6		362	3.5	
	F	10,583	100.0		9,320	88.1		7,509	71.0		5,978	56.5		3,372	31.9		503	4.8	
	T	20,947	100.0		18,467	88.2		15,161	72.4		12,312	58.8		7,891	37.7		865	4.1	

$$x^2 \text{ (5th Year)} = 29.77 \text{ (.001)}$$

$$x^2 \text{ (Grads.)} = 117.14 \text{ (.001)}$$

TABLE CXVIII

YEARLY RETENTION RATES BY CAAT II

"THIRD QUARTILE"

1st Year			2nd Year			3rd Year			4th Year			5th Year			Graduates		
	N	%		N	%		N	%		N	%		N	%		N	%
French																	
M	650	100.0		543	83.5		414	63.7		326	50.2		210	32.3		22	3.4
F	577	100.0		490	84.9		357	61.9		291	50.4		126	21.8		23	4.0
T	1,227	100.0		1,033	84.2		771	62.8		617	50.3		336	27.1		45	3.7
English																	
M	8,986	100.0		7,924	88.2		6,576	73.2		5,409	60.2		3,861	43.0		300	3.3
F	10,252	100.0		9,216	89.9		7,650	74.6		6,170	60.2		3,714	36.2		768	7.5
T	19,238	100.0		17,140	89.1		14,226	73.9		11,579	60.2		7,575	39.6		1,068	5.4
Other																	
M	777	100.0		698	89.8		626	80.6		551	70.9		405	52.1		65	8.4
F	800	100.0		721	90.1		573	71.6		489	61.1		286	35.8		95	11.9
T	1,577	100.0		1,419	90.0		1,199	76.1		1,040	65.5		691	44.0		160	10.2
Total																	
M	10,413	100.0		9,165	88.0		7,616	73.1		6,286	60.4		4,476	43.0		387	3.7
F	11,629	100.0		10,427	89.7		8,580	73.8		6,950	59.8		4,126	35.5		886	7.6
T	22,042	100.0		19,592	88.9		16,196	73.5		13,236	60.0		8,602	39.0		1,273	5.8

$$\chi^2 (5th Year) = 52.49 (.001)$$

$$\chi^2 (Grads.) = 63.27 (.001)$$

T A B L E C X I X

YEARLY RETENTION RATES BY CAAT III

"THIRD QUARTILE"

1st Year			2nd Year			3rd Year			4th Year			5th Year			Graduates		
	N	%	N	%	N	N	%	N	%	N	%	N	%	N	%		
French	M	557	100.0	475	85.3	369	66.2	286	51.3	185	33.2	18	3.2				
	F	624	100.0	527	84.5	388	62.2	310	49.7	131	21.0	23	3.7				
	T	1,181	100.0	1,002	84.9	757	64.2	596	50.5	316	27.1	41	3.5				
English	M	8,660	100.0	7,820	90.3	6,725	77.7	5,721	66.1	4,314	49.8	620	7.2				
	F	9,196	100.0	8,298	90.2	6,883	74.8	5,617	61.1	3,456	37.6	930	10.1				
	T	17,856	100.0	16,118	90.3	13,608	76.3	11,338	63.6	7,770	43.7	1,550	8.7				
Other	M	678	100.0	609	89.8	539	79.5	480	70.8	369	54.4	86	12.7				
	F	736	100.0	663	90.1	522	70.9	445	60.5	258	35.1	95	12.9				
	T	1,414	100.0	1,272	90.0	1,061	75.2	925	65.7	627	44.8	181	12.8				
Total	M	9,895	100.0	8,904	90.0	7,633	77.1	6,487	65.6	4,868	49.2	724	7.3				
	F	10,556	100.0	9,488	89.9	7,793	73.8	6,372	60.4	3,845	36.4	1,048	9.9				
	T	20,451	100.0	18,392	89.9	15,426	75.4	12,859	62.9	8,713	42.6	1,772	8.7				

$$\chi^2 \text{ (5th Year)} = 74.09 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 64.68 \text{ (.001)}$$

TABLE CXX
YEARLY RETENTION RATES BY CAAT I
"FOURTH QUARTILE"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates		
	N	%	N	%	N	%	N	%	N	%	N	%	
French	M	1,374	100.0	1,028	74.8	736	53.6	505	36.8	310	22.6	16	1.2
	F	1,458	100.0	1,109	76.1	711	48.8	492	33.7	207	14.2	21	1.4
	T	2,832	100.0	2,137	75.5	1,447	51.2	997	35.3	517	18.4	37	1.3
English	M	6,153	100.0	4,821	78.4	3,494	56.8	2,598	42.2	1,663	27.0	27	.4
	F	7,437	100.0	5,768	77.6	4,005	53.9	2,718	36.5	1,359	18.3	62	.8
	T	13,590	100.0	10,589	78.0	7,499	55.4	5,316	39.4	3,022	22.7	89	.6
Other	M	708	100.0	581	82.1	469	66.2	395	55.8	256	36.2	27	3.8
	F	815	100.0	660	81.0	432	53.0	309	37.9	147	18.0	23	2.8
	T	1,523	100.0	1,241	81.6	901	59.6	704	46.9	403	27.1	50	3.3
Total	M	8,235	100.0	6,430	78.1	4,699	57.1	3,498	42.5	2,229	27.1	70	.9
	F	9,710	100.0	7,537	77.6	5,148	53.0	3,519	36.2	1,713	17.6	106	1.1
	T	17,945	100.0	13,967	77.8	9,847	54.9	7,017	39.1	3,942	22.0	176	1.0

$$\chi^2 (5th Year) = 32.21 (.001)$$

$$\chi^2 (Grads.) = 100.08 (.001)$$

T A B L E CXXI

YEARLY RETENTION RATES BY CAAT II

"FOURTH QUARTILE"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates		
	N	%	N	%	N	%	N	%	N	%	N	%	
French	M	1,103	100.0	815	73.9	582	52.8	409	37.1	255	23.1	10	.9
	F	1,452	100.0	1,110	76.4	746	51.4	527	36.3	227	15.6	19	1.3
	T	2,555	100.0	1,925	75.2	1,328	52.1	936	36.7	482	19.4	29	1.1
English	M	5,476	100.0	4,342	79.3	3,221	58.8	2,425	44.3	1,592	29.1	37	.7
	F	8,687	100.0	6,941	79.9	4,996	57.5	3,579	41.2	1,899	21.9	162	1.9
	T	14,163	100.0	11,283	79.6	8,217	58.2	6,004	42.8	3,491	25.5	199	1.3
Other	M	507	100.0	415	81.9	321	63.3	275	54.2	190	37.5	20	3.9
	F	825	100.0	664	80.5	462	56.0	344	41.7	173	21.0	26	3.2
	T	1,332	100.0	1,079	81.2	783	59.7	619	48.0	363	29.3	46	3.6
Total	M	7,086	100.0	5,572	78.6	4,124	58.2	3,109	43.9	2,037	28.7	67	.9
	F	10,964	100.0	8,715	79.5	6,204	56.6	4,450	40.6	2,299	21.0	207	1.9
	T	18,050	100.0	14,287	79.2	10,328	57.2	7,559	41.9	4,336	24.0	274	1.5

$$\bar{x}^2 (5th Year) = 36.39 (.001)$$

$$\bar{x}^2 (Grads.) = 36.53 (.001)$$

T A B L E CXXII

YEARLY RETENTION RATES BY CAAT III

"FOURTH QUARTILE"

1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
N	%	N	%	N	%	N	%	N	%	N	%
French											
M	950	677	71.3	481	50.6	322	33.9	201	21.2	12	1.3
F	1,043	770	73.8	476	45.6	337	32.3	151	14.5	17	1.6
T	1,993	1,447	72.6	957	48.1	659	33.1	352	17.9	29	1.5
English											
M	8,109	6,666	82.2	5,187	64.0	4,058	50.0	2,739	33.8	166	2.0
F	8,519	6,864	80.6	5,063	59.4	3,665	43.0	2,030	23.8	278	3.3
T	16,628	13,530	81.4	10,250	61.7	7,723	46.5	4,769	28.8	444	2.7
Other											
M	658	554	84.2	464	70.5	406	61.7	271	41.2	43	6.5
F	716	577	80.6	405	56.6	302	42.2	160	22.3	31	4.3
T	1,374	1,131	82.4	869	63.6	708	52.0	431	31.8	74	5.4
Total											
M	9,717	7,897	81.3	6,132	63.1	4,786	49.3	3,211	33.0	221	2.3
F	10,278	8,211	79.9	5,944	57.8	4,304	41.9	2,341	22.8	326	3.2
T	19,995	16,108	80.6	12,076	60.4	9,090	45.5	5,552	27.8	547	2.7

$$\chi^2 \text{ (5th Year)} = 84.71 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 47.48 \text{ (.001)}$$

T A B L E CXXIII
YEARLY RETENTION RATES BY CEAT I
"FIRST QUARTILE"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	150	100.0	139	92.7	123	82.0	108	72.0	76	50.7	11	7.3
	F	120	100.0	109	90.8	97	80.8	84	70.0	42	35.0	15	12.5
	T	270	100.0	248	91.8	220	81.4	192	71.0	118	42.9	26	9.9
English	M	11,234	100.0	10,826	96.4	10,181	90.6	9,499	84.6	7,987	71.1	2,960	26.3
	F	9,641	100.0	9,286	96.3	8,583	89.0	7,867	81.6	5,948	61.7	3,067	31.8
	T	20,875	100.0	20,112	96.4	18,764	89.8	17,366	83.1	13,935	66.4	6,027	29.1
Other	M	856	100.0	823	96.1	787	91.9	739	86.3	627	73.2	299	34.9
	F	714	100.0	686	96.1	627	87.8	575	80.5	419	58.7	263	36.8
	T	1,570	100.0	1,509	96.1	1,414	89.9	1,314	83.4	1,046	66.0	562	35.9
Total	M	12,240	100.0	11,788	96.3	11,091	90.6	10,346	84.5	8,690	71.0	3,270	26.7
	F	10,475	100.0	10,081	96.2	9,307	88.8	8,526	81.4	6,409	61.2	3,345	31.9
	T	22,715	100.0	21,869	96.3	20,398	89.8	18,872	83.1	15,099	66.5	6,615	29.1

$$\chi^2 \text{ (5th Year)} = 21.31 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 59.69 \text{ (.001)}$$

TABLE CXXIV

YEARLY RETENTION RATES BY CEAT II

"FIRST QUARTILE"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	102	100.0	98	96.1	95	93.1	84	82.4	53	52.0	19	18.6
	F	199	100.0	186	93.5	158	79.4	140	70.4	65	32.7	33	16.6
	T	301	100.0	284	94.8	253	86.3	224	76.4	118	42.4	52	17.6
English	M	7,365	100.0	7,219	98.0	6,921	94.0	6,586	89.4	5,734	77.9	2,677	36.3
	F	10,782	100.0	10,464	97.1	9,777	90.7	9,005	83.5	6,890	63.9	3,661	34.0
	T	18,147	100.0	17,683	97.6	16,698	92.4	15,591	86.5	12,624	70.9	6,338	35.2
Other	M	669	100.0	652	97.5	629	94.0	598	89.4	513	76.7	268	40.1
	F	922	100.0	879	95.3	789	85.6	734	79.6	558	60.5	346	37.5
	T	1,591	100.0	1,531	96.4	1,418	89.8	1,332	84.5	1,071	68.6	614	38.8
Total	M	8,136	100.0	7,969	97.9	7,645	94.0	7,268	89.3	6,300	77.4	2,964	36.4
	F	11,903	100.0	11,529	96.9	10,724	90.1	9,879	83.0	7,513	63.1	4,040	33.9
	T	20,039	100.0	19,498	97.3	18,369	91.7	17,147	85.6	13,813	68.9	7,004	35.0

$$\bar{x}^2 \text{ (5th Year)} = 40.25 \text{ (.001)}$$

$$\bar{x}^2 \text{ (Grads.)} = 32.94 \text{ (.001)}$$

T A B L E CXXV

YEARLY RETENTION RATES BY CEAT III

"FIRST QUARTILE"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	108	100.0	100	92.6	88	81.5	81	75.0	61	56.5	18	16.7
	F	142	100.0	134	94.4	119	83.8	107	75.4	54	38.0	20	14.1
	T	250	100.0	234	93.5	207	82.7	188	75.2	115	47.3	38	15.4
English	M	9,679	100.0	9,379	96.9	8,883	91.8	8,312	85.9	7,056	72.9	2,843	29.4
	F	8,767	100.0	8,536	97.4	7,997	91.2	7,402	84.4	5,751	65.6	3,152	36.0
	T	18,446	100.0	17,915	97.2	16,880	91.5	15,714	85.2	12,807	69.3	5,995	32.7
Other	M	619	100.0	601	97.1	578	93.4	549	88.7	486	78.5	236	38.1
	F	554	100.0	531	95.8	488	88.1	460	83.0	351	63.4	222	40.1
	T	1,173	100.0	1,132	96.5	1,066	90.8	1,009	85.9	837	71.0	458	39.1
Total	M	10,406	100.0	10,080	96.9	9,549	91.8	8,942	85.9	7,603	73.1	3,097	29.8
	F	9,463	100.0	9,201	97.2	8,604	90.9	7,969	84.2	6,156	65.1	3,394	35.9
	T	19,869	100.0	19,281	97.0	18,153	91.4	16,911	85.1	13,759	69.2	6,491	32.7

$$\chi^2 \text{ (5th Year)} = 20.35 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 38.11 \text{ (.001)}$$

T A B L E CXXVI

YEARLY RETENTION RATES BY CEAT I

"SECOND QUARTILE"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates		
	N	%	N	%	N	%	N	%	N	%	N	%	
French	M	305	100.0	271	88.9	234	76.7	198	64.9	133	43.6	20	6.6
	F	307	100.0	266	86.6	212	69.1	171	55.7	87	28.3	22	7.2
	T	612	100.0	537	87.8	446	72.9	369	60.3	220	36.0	42	6.9
English	M	9,180	100.0	8,492	92.5	7,505	81.8	6,525	71.1	5,008	54.6	873	9.5
	F	8,600	100.0	7,911	92.0	6,824	79.3	5,780	67.2	3,762	43.7	1,230	14.3
	T	17,780	100.0	16,403	92.3	14,329	80.6	12,305	69.2	8,770	49.2	2,103	11.9
Other	M	743	100.0	685	92.2	633	85.2	577	77.7	452	60.8	112	15.1
	F	708	100.0	653	92.2	528	74.6	462	65.3	280	39.5	115	16.2
	T	1,451	100.0	1,338	92.2	1,161	79.9	1,039	71.5	732	50.2	227	15.7
Total	M	10,228	100.0	9,448	92.4	8,372	81.9	7,300	71.4	5,593	54.7	1,005	9.8
	F	9,615	100.0	8,830	91.8	7,564	78.7	6,413	66.7	4,129	42.9	1,367	14.2
	T	19,843	100.0	18,278	92.1	15,936	80.3	13,713	69.1	9,722	49.0	2,372	12.0

$$\chi^2 \text{ (5th Year)} = 22.29 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 30.04 \text{ (.001)}$$

T A B L E CXXVII

YEARLY RETENTION RATES BY CEAT II

"SECOND QUARTILE"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates		
	N	%	N	%	N	%	N	%	N	%	N	%	
French	M	203	100.0	189	93.1	170	83.7	152	74.9	94	46.3	21	10.3
	F	352	100.0	314	89.2	250	71.0	202	57.4	97	27.6	19	5.4
	T	555	100.0	503	91.2	420	77.4	354	66.2	191	37.0	40	7.9
English	M	8,253	100.0	7,821	94.8	7,103	86.1	6,378	77.3	5,055	61.3	1,021	12.4
	F	8,594	100.0	7,967	92.7	6,914	80.5	5,822	67.7	3,603	41.9	925	10.8
	T	16,847	100.0	15,788	93.8	14,017	83.3	12,200	72.5	8,658	51.6	1,946	11.6
Other	M	694	100.0	649	93.5	611	88.0	567	81.7	454	65.4	142	20.5
	F	718	100.0	659	91.8	546	76.0	461	64.2	270	37.6	87	12.1
	T	1,412	100.0	1,308	92.7	1,157	82.0	1,028	73.0	724	51.5	229	16.3
Total	M	9,150	100.0	8,659	94.6	7,884	86.2	7,097	77.6	5,603	61.2	1,184	12.9
	F	9,664	100.0	8,940	92.5	7,710	79.8	6,485	67.1	3,970	41.1	1,031	10.7
	T	18,814	100.0	17,599	93.5	15,594	82.9	13,582	72.2	9,573	50.9	2,215	11.8

 χ^2 (5th Year) = 30.48 (.001) χ^2 (Grads.) = 34.23 (.001)

T A B L E CXXVIII

YEARLY RETENTION RATES BY CEAT III

"SECOND QUARTILE"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates		
	N	%	N	%	N	%	N	%	N	%	N	%	
French	M	369	100.0	329	89.2	291	78.9	238	64.5	163	44.2	27	7.3
	F	394	100.0	346	87.8	290	73.6	245	62.2	112	28.4	30	7.6
	T	763	100.0	675	88.5	581	76.3	483	63.4	275	36.3	57	7.5
English	M	9,466	100.0	8,843	93.4	7,940	83.9	7,006	74.0	5,430	57.4	968	10.2
	F	9,496	100.0	8,821	92.9	7,630	80.3	6,483	68.3	4,152	43.7	1,267	13.3
	T	18,962	100.0	17,664	93.2	15,570	82.1	13,489	71.2	9,582	50.6	2,235	11.8
Other	M	781	100.0	734	94.0	678	86.8	624	79.9	497	63.6	154	19.7
	F	753	100.0	695	92.3	589	78.2	518	68.8	336	44.6	142	18.9
	T	1,534	100.0	1,429	93.2	1,267	82.5	1,142	74.4	833	54.1	296	19.3
Total	M	10,616	100.0	9,906	93.3	8,909	83.9	7,868	74.1	6,090	57.4	1,149	10.8
	F	10,643	100.0	9,862	92.7	8,509	79.9	7,246	68.1	4,600	43.2	1,439	13.5
	T	21,259	100.0	19,768	93.0	17,418	81.9	15,114	71.1	10,690	50.3	2,588	12.2

$$\chi^2 \text{ (5th Year)} = 35.93 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 80.12 \text{ (.001)}$$

T A B L E CXXIX

YEARLY RETENTION RATES BY CEAT I

"THIRD QUARTILE"

	1st Year			2nd Year			3rd Year			4th Year			5th Year			Graduates		
	N	%		N	%		N	%		N	%		N	%		N	%	
French	M	483	100.0	404	83.6		313	64.8		244	50.5		144	29.8		26	5.4	
	F	582	100.0	487	83.7		350	60.1		279	47.9		110	18.9		17	2.9	
	T	1,065	100.0	891	83.7		663	62.5		523	49.2		254	24.4		43	4.2	
English	M	8,065	100.0	7,124	88.3		5,997	74.4		4,998	62.0		3,616	44.8		383	4.7	
	F	8,295	100.0	7,289	87.9		5,835	70.3		4,586	55.3		2,678	32.3		511	6.2	
	T	16,360	100.0	14,413	88.1		11,832	72.4		9,584	58.7		6,294	38.6		894	5.5	
Other	M	648	100.0	586	90.4		516	79.6		464	71.6		335	51.7		67	10.3	
	F	657	100.0	574	87.4		444	67.6		361	54.9		204	31.1		52	7.9	
	T	1,305	100.0	1,160	88.9		960	73.6		825	63.3		539	41.4		119	9.1	
Total	M	9,196	100.0	8,114	88.2		6,826	74.2		5,706	62.0		4,095	44.5		476	5.2	
	F	9,534	100.0	8,350	87.6		6,629	69.5		5,226	54.8		2,992	31.4		580	6.1	
	T	18,730	100.0	16,464	87.9		13,455	71.8		10,932	58.4		7,087	37.8		1,056	5.6	

$$\chi^2 \text{ (5th Year)} = 60.95 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 33.76 \text{ (.001)}$$

TABLE CXXX

YEARLY RETENTION RATES BY CEAT II

"THIRD QUARTILE"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates		
	N	%	N	%	N	%	N	%	N	%	N	%	
French	M	478	100.0	413	86.4	324	67.8	264	55.2	181	37.9	25	4.8
	F	619	100.0	506	81.7	371	59.9	286	46.2	136	22.0	14	2.3
	T	1,097	100.0	919	84.1	695	63.9	550	50.7	317	30.0	37	3.6
English	M	9,778	100.0	8,873	90.7	7,691	78.7	6,522	66.7	4,828	49.4	479	4.9
	F	8,127	100.0	7,068	87.0	5,513	67.8	4,224	52.0	2,364	29.1	324	4.0
	T	17,905	100.0	15,941	88.9	13,204	73.3	10,746	59.4	7,192	39.3	803	4.5
Other	M	728	100.0	666	91.5	594	81.6	526	72.3	385	52.9	66	9.1
	F	643	100.0	555	86.3	407	63.3	324	50.4	165	25.7	21	3.3
	T	1,371	100.0	1,221	88.9	1,001	72.5	850	61.4	550	39.3	87	6.2
Total	M	10,984	100.0	9,952	90.6	8,609	78.4	7,312	66.6	5,394	49.1	568	5.2
	F	9,389	100.0	8,129	86.6	6,291	67.0	4,834	51.5	2,665	28.4	359	3.8
	T	20,373	100.0	18,081	88.7	14,900	73.1	12,146	59.6	8,059	39.6	927	4.6

$$\chi^2 \text{ (5th Year)} = 33.31 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 13.22 \text{ (.005)}$$

T A B L E CXXXI
YEARLY RETENTION RATES BY CEAT III
"THIRD QUARTILE"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	429	100.0	375	87.4	303	70.6	242	56.4	147	34.3	19	4.4
	F	520	100.0	445	85.6	326	62.7	258	49.6	107	20.6	17	3.3
	T	949	100.0	820	86.5	629	66.7	500	53.0	254	27.5	36	3.9
English	M	7,025	100.0	6,318	89.9	5,357	76.3	4,538	64.6	3,280	46.7	355	5.1
	F	7,205	100.0	6,382	88.6	5,130	71.2	4,036	56.0	2,347	32.6	419	5.8
	T	14,230	100.0	12,700	89.3	10,487	73.8	8,574	60.3	5,627	39.7	774	5.5
Other	M	639	100.0	579	90.6	520	81.4	460	72.0	327	51.2	71	11.1
	F	640	100.0	577	90.2	449	70.2	356	55.6	205	32.0	53	8.3
	T	1,279	100.0	1,156	90.4	969	75.8	816	63.8	532	41.6	124	9.7
Total	M	8,093	100.0	7,272	89.9	6,180	76.4	5,240	64.7	3,754	46.4	445	5.5
	F	8,365	100.0	7,404	88.5	5,905	70.6	4,650	55.6	2,659	31.8	499	5.8
	T	16,458	100.0	14,676	89.2	12,085	73.4	9,890	60.1	6,413	39.0	934	5.7

χ^2 (5th Year) = 39.74 (.001)

χ^2 (Grads.) = 43.74 (.001)

T A B L E CXXXII

YEARLY RETENTION RATES BY CEAT I

"FOURTH QUARTILE"

229

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates		
	N	%	N	%	N	%	N	%	N	%	N	%	
French	M	1,139	100.0	839	73.7	631	55.4	446	39.2	282	24.8	17	1.5
	F	1,250	100.0	954	76.3	625	50.0	441	35.3	191	15.3	22	1.8
	T	2,389	100.0	1,793	75.0	1,256	52.7	887	37.3	473	20.1	39	1.7
English	M	6,168	100.0	5,057	82.0	3,853	62.5	2,968	48.1	1,995	32.3	108	1.8
	F	6,878	100.0	5,590	81.3	4,131	60.1	2,985	43.4	1,608	23.4	187	2.7
	T	13,046	100.0	10,647	81.7	7,984	61.3	5,953	45.8	3,603	27.9	295	2.3
Other	M	558	100.0	459	82.3	364	65.2	311	55.7	218	39.1	35	6.3
	F	654	100.0	531	81.2	367	56.1	277	42.4	151	23.1	28	4.3
	T	1,212	100.0	990	81.8	731	60.7	588	49.1	369	31.1	63	5.3
Total	M	7,865	100.0	6,355	80.8	4,848	61.6	3,725	47.4	2,495	31.7	160	2.0
	F	8,782	100.0	7,075	80.6	5,123	58.3	3,703	42.2	1,950	22.2	237	2.7
	T	16,647	100.0	13,430	80.7	9,971	59.9	7,428	44.6	4,445	26.7	397	2.4

$$x^2 \text{ (5th Year)} = 53.09 \text{ (.001)}$$

$$x^2 \text{ (Grads.)} = 46.73 \text{ (.001)}$$

T A B L E CXXXIII

YEARLY RETENTION RATES BY CEAT II

"FOURTH QUARTILE"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	1,278	100.0	949	74.3	707	55.3	493	38.6	302	23.6	10	.8
	F	1,083	100.0	817	75.4	509	47.0	348	32.1	130	12.0	12	1.1
	T	2,361	100.0	1,766	74.9	1,216	51.2	841	35.4	432	17.8	22	1.0
English	M	9,196	100.0	7,521	81.8	5,782	62.9	4,479	48.7	2,971	32.3	136	1.5
	F	5,807	100.0	4,482	77.2	3,080	53.0	2,103	36.2	1,082	18.6	65	1.1
	T	15,003	100.0	12,003	79.5	8,862	58.0	6,582	42.5	4,053	25.5	201	1.3
Other	M	700	100.0	579	82.7	460	65.7	389	55.6	268	38.3	31	4.4
	F	451	100.0	353	78.3	225	49.9	152	33.7	63	14.0	5	.7
	T	1,151	100.0	932	80.5	685	57.8	541	44.7	331	26.2	34	2.6
Total	M	11,174	100.0	9,049	81.0	6,949	62.2	5,361	48.0	3,541	31.7	177	1.6
	F	7,341	100.0	5,652	77.0	3,814	52.0	2,603	35.5	1,275	17.4	80	1.1
	T	18,515	100.0	14,701	79.4	10,763	58.1	7,964	43.0	4,816	26.0	257	1.4

$$\chi^2 (5th Year) = 63.16 (.001)$$

$$\chi^2 (Grads.) = 24.13 (.001)$$

TABLE CXXXIV

YEARLY RETENTION RATES BY CEAT III

"FOURTH QUARTILE"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates		
	N	%	N	%	N	%	N	%	N	%	N	%	
French	M	1,144	100.0	836	73.1	607	53.1	420	36.7	252	22.0	8	.7
	F	1,196	100.0	900	75.3	552	46.2	366	30.6	157	13.1	11	.9
	T	2,340	100.0	1,736	74.2	1,159	49.7	786	33.7	409	17.6	19	.8
English	M	8,366	100.0	6,878	82.2	5,290	63.2	4,084	48.8	2,792	33.4	145	1.7
	F	7,816	100.0	6,233	79.7	4,517	57.8	3,223	41.2	1,705	21.8	149	1.9
	T	16,182	100.0	13,111	81.0	9,807	60.5	7,307	45.0	4,497	27.6	294	1.8
Other	M	767	100.0	643	83.8	529	69.0	459	59.8	321	41.9	51	6.6
	F	758	100.0	613	80.9	414	54.6	316	41.7	149	19.7	30	4.0
	T	1,525	100.0	1,256	82.4	943	61.8	775	50.8	470	30.8	81	5.3
Total	M	10,277	100.0	8,357	81.3	6,426	62.5	4,963	48.3	3,365	32.7	204	2.0
	F	9,770	100.0	7,746	79.3	5,483	56.1	3,905	40.0	2,011	20.6	190	1.9
	T	20,047	100.0	16,103	80.3	11,909	59.4	8,868	44.2	5,376	26.8	394	2.0

$$\chi^2 \text{ (5th Year)} = 90.92 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 104.53 \text{ (.001)}$$

T A B L E CXXXV
YEARLY RETENTION RATES BY CMAT I

"FIRST QUARTILE"

	1st Year			2nd Year			3rd Year			4th Year			5th Year			Graduates		
	N	%		N	%		N	%		N	%		N	%		N	%	
English	M	207	100.0	182	87.9		151	72.9		131	63.3		93	44.9		24	11.6	
	F	335	100.0	298	89.0		237	70.7		199	59.4		97	29.0		24	7.2	
	T	542	100.0	480	88.5		388	71.8		330	61.4		190	37.0		48	9.4	
English	M	6,147	100.0	5,951	96.8		5,631	91.6		5,264	85.6		4,448	72.4		1,899	30.9	
	F	7,817	100.0	7,517	96.2		6,861	87.8		6,187	79.1		4,470	57.2		2,338	29.9	
	T	13,964	100.0	13,468	96.5		12,492	89.7		11,451	82.4		8,918	64.8		4,237	30.4	
Math	M	642	100.0	617	96.1		591	92.1		560	87.2		466	72.6		213	33.2	
	F	755	100.0	718	95.1		618	81.9		572	75.8		403	53.4		240	31.8	
	T	1,397	100.0	1,335	95.6		1,209	87.0		1,132	81.5		869	63.0		453	32.5	
Total	M	6,996	100.0	6,750	96.5		6,373	91.1		5,955	85.1		5,007	71.6		2,136	30.5	
	F	8,907	100.0	8,533	95.8		7,716	86.6		6,958	78.1		4,970	55.8		2,602	29.2	
	T	15,903	100.0	15,283	96.1		14,089	88.6		12,913	81.2		9,977	62.7		4,738	29.8	

$$\chi^2 \text{ (5th Year)} = 69.09 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 84.41 \text{ (.001)}$$

T A B L E CXXXVI

YEARLY RETENTION RATES BY CMAT II

"FIRST QUARTILE"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	151	100.0	141	93.4	128	84.8	112	74.2	80	53.0	24	15.9
	F	90	100.0	83	92.2	74	82.2	62	68.9	36	40.0	13	14.4
	T	241	100.0	224	92.8	202	83.5	174	71.6	116	46.5	37	15.2
English	M	11,558	100.0	11,236	97.2	10,674	92.4	10,018	86.7	8,542	73.9	3,343	28.9
	F	7,361	100.0	7,237	98.3	6,880	93.5	6,461	87.8	5,075	68.9	2,973	40.4
	T	18,919	100.0	18,473	97.8	17,554	93.0	16,479	87.3	13,617	71.4	6,316	34.7
Other	M	924	100.0	890	96.3	855	92.5	815	88.2	695	75.2	338	36.6
	F	528	100.0	517	97.9	474	89.8	444	84.1	336	63.6	222	42.0
	T	1,452	100.0	1,407	97.1	1,329	91.2	1,259	86.2	1,031	69.4	560	38.5
Total	M	12,633	100.0	12,267	97.1	11,657	92.3	10,945	86.6	9,317	73.8	3,705	29.3
	F	7,979	100.0	7,837	98.2	7,428	93.1	6,967	87.3	5,447	68.3	3,208	40.2
	T	20,612	100.0	20,104	97.5	19,085	92.6	17,912	86.9	14,764	71.6	6,913	33.5

$$\chi^2 \text{ (5th Year)} = 18.97 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 34.85 \text{ (.001)}$$

YEARLY RETENTION RATES BY CMAT III

"FIRST QUARTILE"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates		
	N	%	N	%	N	%	N	%	N	%	N	%	
French	M	221	100.0	202	91.4	168	76.0	142	64.3	90	40.7	23	10.4
	F	176	100.0	160	90.9	135	76.7	111	63.1	59	33.5	22	12.5
	T	397	100.0	362	91.2	303	76.4	253	63.7	149	37.1	45	11.5
English	M	10,051	100.0	9,702	96.5	9,155	91.1	8,537	84.9	7,239	72.0	2,803	27.9
	F	7,530	100.0	7,360	97.7	6,922	91.9	6,383	84.8	4,894	65.0	2,745	36.5
	T	17,581	100.0	17,062	97.1	16,077	91.5	14,920	84.9	12,133	68.5	5,548	32.2
Other	M	916	100.0	877	95.7	833	90.9	782	85.4	661	72.2	306	33.4
	F	671	100.0	654	97.5	590	87.9	548	81.7	394	58.7	242	36.1
	T	1,587	100.0	1,531	96.6	1,423	89.4	1,330	83.6	1,055	65.5	548	34.8
Total	M	11,188	100.0	10,781	96.4	10,156	90.8	9,461	84.6	7,990	71.4	3,132	28.0
	F	8,377	100.0	8,174	97.6	7,647	91.3	7,042	84.1	5,347	63.8	3,009	35.9
	T	19,565	100.0	18,955	96.9	17,803	91.0	16,503	84.3	13,337	68.2	6,141	31.4

$$\chi^2 \text{ (5th Year)} = 57.16 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 56.01 \text{ (.001)}$$

TABLE CXXXVIII

YEARLY RETENTION RATES BY CMAT I

"SECOND QUARTILE"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates		
	N	%	N	%	N	%	N	%	N	%	N	%	
French	M	417	100.0	362	86.8	295	70.7	237	56.8	143	34.3	28	6.7
	F	546	100.0	458	83.9	349	63.9	268	49.1	109	20.0	29	5.3
	T	963	100.0	820	85.4	644	67.3	505	53.0	252	27.2	57	6.0
English	M	9,149	100.0	8,627	94.3	7,810	85.4	7,029	76.8	5,642	61.7	1,442	15.8
	F	9,694	100.0	9,028	93.1	7,795	80.4	6,634	68.4	4,369	45.1	1,569	16.2
	T	18,843	100.0	17,655	93.7	15,605	82.9	13,663	72.6	10,011	53.4	3,011	16.0
Other	M	809	100.0	760	93.9	703	86.9	640	79.1	505	62.4	178	22.0
	F	782	100.0	721	92.2	590	75.4	505	64.6	320	40.9	122	15.6
	T	1,591	100.0	1,481	93.1	1,293	81.2	1,145	71.9	825	51.7	300	18.8
Total	M	10,375	100.0	9,749	94.0	8,808	84.9	7,906	76.2	6,290	60.6	1,648	15.9
	F	11,022	100.0	10,207	92.6	8,734	79.2	7,407	67.2	4,798	43.5	1,720	15.6
	T	21,397	100.0	19,956	93.3	17,542	82.0	15,313	71.6	11,088	51.8	3,368	15.7

$$\chi^2 \text{ (5th Year)} = 128.51 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 69.51 \text{ (.001)}$$

T A B L E CXXXIX

YEARLY RETENTION RATES BY CMAT II

"SECOND QUARTILE"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	271	100.0	238	87.8	197	72.7	166	61.3	102	37.6	19	7.0
	F	248	100.0	227	91.5	185	74.6	163	65.7	80	32.3	25	10.1
	T	519	100.0	465	89.7	382	73.7	329	63.5	182	35.0	44	8.6
English	M	10,126	100.0	9,415	93.0	8,360	82.6	7,296	72.1	5,528	54.6	745	7.4
	F	8,941	100.0	8,496	95.0	7,558	84.5	6,603	73.9	4,442	49.7	1,436	16.1
	T	19,067	100.0	17,911	94.0	15,918	83.6	13,899	73.0	9,970	52.2	2,181	11.3
Other	M	776	100.0	730	94.1	674	86.9	607	78.2	471	60.7	121	15.6
	F	722	100.0	679	94.0	585	81.0	527	73.0	354	49.0	159	22.0
	T	1,498	100.0	1,409	94.1	1,259	84.0	1,134	75.6	825	54.9	280	18.8
Total	M	11,173	100.0	10,383	92.9	9,231	82.6	8,069	72.2	6,101	54.6	885	7.9
	F	9,911	100.0	9,402	94.9	8,328	84.0	7,293	73.6	4,876	49.2	1,620	16.3
	T	21,084	100.0	19,785	93.8	17,559	83.3	15,362	72.9	10,977	52.1	2,505	11.9

$$\chi^2 \text{ (5th Year)} = 31.58 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 66.68 \text{ (.001)}$$

T A B L E CXL

YEARLY RETENTION RATES BY CMAT III

"SECOND QUARTILE"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates		
	N	%	N	%	N	%	N	%	N	%	N	%	
French	M	477	100.0	406	85.1	327	68.6	272	57.0	180	37.7	28	5.9
	F	366	100.0	318	86.9	251	68.6	204	55.7	91	24.9	22	6.0
	T	843	100.0	724	86.0	578	68.6	476	56.4	271	31.3	50	6.0
English	M	10,806	100.0	10,040	92.9	8,967	83.0	7,894	73.1	6,085	56.3	1,127	10.4
	F	9,035	100.0	8,498	94.1	7,481	82.8	6,454	71.4	4,238	46.9	1,455	16.1
	T	19,841	100.0	18,538	93.5	16,448	82.9	14,348	72.3	10,323	51.6	2,582	13.3
Other	M	932	100.0	865	92.8	792	85.0	707	75.9	543	58.3	145	15.6
	F	748	100.0	686	91.7	573	76.6	516	69.0	317	42.4	132	17.6
	T	1,680	100.0	1,551	92.3	1,365	80.8	1,223	72.5	860	50.4	277	16.6
Total	M	12,215	100.0	11,311	92.6	10,086	82.6	8,873	72.6	6,808	55.7	1,300	10.6
	F	10,149	100.0	9,502	93.6	8,305	81.8	7,174	70.7	4,646	45.8	1,609	15.9
	T	22,364	100.0	20,813	93.1	18,391	82.2	16,047	71.8	11,454	51.2	2,909	13.0

$$\chi^2 (5th Year) = 62.41 (.001)$$

$$\chi^2 (Grads.) = 48.10 (.001)$$

TABLE CXL I

YEARLY RETENTION RATES BY CMAT I

"THIRD QUARTILE"

238

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates		
	N	%	N	%	N	%	N	%	N	%	N	%	
French	M	591	100.0	486	82.2	387	65.5	297	50.3	193	32.7	15	2.5
	F	653	100.0	522	79.9	364	55.7	271	41.5	115	17.6	13	2.0
	T	1,244	100.0	1,008	81.1	751	60.6	568	45.9	308	25.2	28	2.3
English	M	9,761	100.0	8,861	90.8	7,674	78.6	6,566	67.3	4,898	50.2	704	7.2
	F	9,042	100.0	8,024	88.7	6,543	72.4	5,312	58.7	3,313	36.6	823	9.1
	T	18,803	100.0	16,885	89.8	14,217	75.5	11,878	63.0	8,211	43.4	1,527	8.2
Other	M	748	100.0	678	90.6	605	80.9	545	72.9	419	56.0	95	12.7
	F	697	100.0	606	86.9	476	68.3	385	55.2	221	31.7	71	10.2
	T	1,445	100.0	1,284	88.8	1,081	74.6	930	64.1	640	43.9	166	11.5
Total	M	11,100	100.0	10,025	90.3	8,666	78.1	7,408	66.7	5,510	49.6	814	7.3
	F	10,392	100.0	9,152	88.1	7,383	71.0	5,968	57.4	3,649	35.1	907	8.7
	T	21,492	100.0	19,177	89.2	16,049	74.7	13,376	62.2	9,159	42.6	1,721	8.0

$$\chi^2 \text{ (5th Year)} = 98.92 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 73.64 \text{ (.001)}$$

T A B L E CXLII

YEARLY RETENTION RATES BY CMAT II

"THIRD QUARTILE"

1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
N	%	N	%	N	%	N	%	N	%	N	%
French											
M	518	447	86.3	367	70.8	295	56.9	184	35.5	23	4.4
F	525	444	84.6	340	64.8	268	51.0	107	20.4	19	3.6
T	1,043	891	85.5	707	67.8	563	54.0	291	28.0	42	4.0
English											
M	7,674	6,703	87.3	5,506	71.7	4,490	58.5	3,114	40.6	192	2.5
F	8,878	7,916	89.2	6,414	72.2	5,026	56.6	2,850	32.2	451	5.1
T	16,552	14,619	88.3	11,920	72.0	9,516	57.6	5,974	36.4	643	3.8
Other											
M	592	533	90.0	466	78.7	404	68.2	286	48.3	45	7.6
F	735	651	88.6	518	70.5	417	56.7	222	30.2	54	7.3
T	1,327	1,184	89.3	984	74.6	821	62.5	503	39.3	99	7.5
Total											
M	8,784	7,683	87.5	6,339	72.2	5,189	59.1	3,584	40.8	260	3.0
F	10,138	9,011	88.9	7,272	71.7	5,711	56.3	3,189	31.5	524	5.2
T	18,922	16,694	88.2	13,611	71.9	10,900	57.6	6,773	35.8	784	4.1

$$\chi^2 \text{ (5th Year)} = 20.86 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 37.95 \text{ (.001)}$$

TABLE CXLIII
YEARLY RETENTION RATES BY CMAT III
"THIRD QUARTILE"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	474	100.0	398	84.0	313	66.0	233	49.2	142	30.0	12	2.5
	F	498	100.0	417	83.7	306	61.4	246	49.4	107	21.5	14	2.8
	T	972	100.0	815	83.9	619	63.7	479	49.3	249	25.8	26	2.7
English	M	7,444	100.0	6,648	89.3	5,575	74.9	4,619	62.0	3,317	44.6	290	3.9
	F	7,344	100.0	6,583	89.6	5,421	73.8	4,368	59.5	2,652	36.1	562	7.7
	T	14,788	100.0	13,231	89.5	10,996	74.4	8,987	60.8	5,969	40.4	852	5.8
Other	M	530	100.0	466	87.9	399	75.3	363	68.5	258	48.7	46	8.7
	F	598	100.0	530	88.6	411	68.7	326	54.5	197	32.9	54	9.0
	T	1,128	100.0	996	88.3	810	72.0	689	61.5	455	40.8	100	8.9
Total	M	8,448	100.0	7,512	88.9	6,287	74.4	5,215	61.7	3,717	44.0	348	4.1
	F	8,440	100.0	7,530	89.2	6,138	72.7	4,940	58.5	2,956	35.0	630	7.5
	T	16,888	100.0	15,042	89.1	12,425	73.6	10,155	60.1	6,673	39.5	978	5.8

$$\chi^2 \text{ (5th Year)} = 50.40 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 34.73 \text{ (.001)}$$

TABLE CXLIV

YEARLY RETENTION RATES BY CMAT I

"FOURTH QUARTILE"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	841	100.0	616	73.2	465	55.3	321	38.2	203	24.1	7	.8
	F	719	100.0	542	75.4	338	47.0	241	33.5	108	15.0	11	1.5
	T	1,560	100.0	1,158	74.3	803	51.2	562	35.9	311	19.6	18	1.2
English	M	9,392	100.0	7,931	84.4	6,334	67.4	5,062	53.9	3,558	37.9	261	2.8
	F	6,669	100.0	5,396	80.9	4,088	61.3	2,995	44.9	1,773	26.6	244	3.7
	T	16,061	100.0	13,327	82.7	10,422	64.4	8,057	49.4	5,331	32.3	505	3.3
Other	M	598	100.0	494	82.6	400	66.9	342	57.2	236	39.5	27	4.5
	F	485	100.0	382	78.8	271	55.9	202	41.6	107	22.1	18	3.7
	T	1,083	100.0	876	80.7	671	61.4	544	49.4	343	30.8	45	4.1
Total	M	10,831	100.0	9,041	83.5	7,199	66.5	5,725	52.9	3,997	36.9	295	2.7
	F	7,873	100.0	6,320	80.3	4,697	59.7	3,438	43.7	1,988	25.3	273	3.5
	T	18,704	100.0	15,361	82.1	11,896	63.6	9,163	49.0	5,985	32.0	568	5.0

$$\chi^2 \text{ (5th Year)} = 78.12 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 23.28 \text{ (.001)}$$

T A B L E CXLV

YEARLY RETENTION RATES BY CWAT II

"FOURTH QUARTILE"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	1,116	100.0	810	72.6	595	53.3	407	36.5	259	23.2	8	.7
	F	1,391	100.0	1,068	76.8	693	49.8	485	34.9	204	14.7	19	1.4
	T	2,507	100.0	1,878	74.7	1,288	51.6	892	35.7	463	19.0	27	1.1
English	M	5,162	100.0	4,050	78.5	2,914	56.5	2,108	40.8	1,358	26.3	23	.4
	F	8,082	100.0	6,318	78.2	4,417	54.7	3,027	37.5	1,540	19.1	107	1.3
	T	13,244	100.0	10,368	78.4	7,331	55.6	5,135	39.2	2,898	22.7	130	.9
Other	M	512	100.0	399	77.9	306	59.8	262	51.2	172	33.6	8	1.6
	F	735	100.0	586	79.7	377	51.3	275	37.4	140	19.0	15	2.0
	T	1,247	100.0	985	78.8	683	55.6	537	44.3	312	26.3	23	1.9
Total	M	6,790	100.0	5,259	77.5	3,815	56.2	2,777	40.9	1,789	26.3	39	.6
	F	10,208	100.0	7,972	78.1	5,487	53.8	3,787	37.1	1,884	18.5	141	1.4
	T	16,998	100.0	13,231	77.8	9,302	54.7	6,564	38.6	3,673	21.6	180	1.1

$$\chi^2 (5th Year) = 18.61 (.001)$$

$$\chi^2 (Grads.) = 8.02 (.025)$$

TABLE CXLVI

YEARLY RETENTION RATES BY CMAT III

"FOURTH QUARTILE"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates		
	N	%	N	%	N	%	N	%	N	%	N	%	
French	M	889	100.0	636	71.5	489	55.0	341	38.4	221	24.9	11	1.2
	F	1,194	100.0	915	76.6	592	49.6	408	34.2	168	14.1	18	1.5
	T	2,083	100.0	1,551	74.1	1,081	52.3	749	36.3	389	19.5	29	1.4
English	M	6,119	100.0	4,966	81.2	3,724	60.9	2,844	46.5	1,909	31.2	87	1.4
	F	9,272	100.0	7,477	80.6	5,414	58.4	3,891	42.0	2,126	22.9	198	2.1
	T	15,391	100.0	12,443	80.9	9,138	59.7	6,735	44.3	4,035	27.1	285	1.8
Other	M	426	100.0	345	81.0	276	64.8	234	54.9	159	37.3	15	3.5
	F	694	100.0	555	80.0	375	54.0	269	38.8	140	20.2	21	3.0
	T	1,120	100.0	900	80.5	651	59.4	503	46.9	299	28.8	36	3.3
Total	M	7,434	100.0	5,947	80.0	4,489	60.4	3,419	46.0	2,289	30.8	113	1.5
	F	11,160	100.0	8,947	80.2	6,381	57.2	4,568	40.9	2,434	21.8	237	2.1
	T	18,594	100.0	14,894	80.1	10,870	58.5	7,987	43.0	4,723	25.4	350	1.9

$$\chi^2 \text{ (5th Year)} = 41.87 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 13.29 \text{ (.005)}$$

TABLE CXLVII

YEARLY RETENTION RATES BY YEAR OF BIRTH OF STUDENTS

"1941 OR BEFORE, 1942 AND 1943"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	657	100.0	322	49.0	157	23.9	87	13.2	45	6.8	1	.2
English	7,265	100.0	4,288	59.0	2,290	31.5	1,383	19.0	619	8.5	18	.2
Other	961	100.0	703	73.2	490	51.0	391	40.7	210	21.9	37	3.9
Total	8,883	100.0	5,313	59.8	2,937	33.1	1,861	21.0	874	9.8	56	.6

 χ^2 (5th Year) = 159.77 (.001) χ^2 (Grads.) = 177.29 (.001)

TABLE CXLVIII
YEARLY RETENTION RATES BY YEAR OF BIRTH OF STUDENTS

"1944"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	1,299	100.0	870	67.0	535	41.2	339	26.1	176	13.5	7	.5
English	17,250	100.0	13,689	79.4	9,781	56.7	6,894	40.0	3,857	22.4	246	1.4
Other	1,812	100.0	1,526	84.2	1,200	66.2	996	55.0	635	35.0	157	8.7
Total	20,361	100.0	16,085	79.0	11,516	56.6	8,229	40.4	4,668	22.9	410	2.0

χ^2 (5th Year) = 168.30 (.001)
 χ^2 (Grads.) = 441.65 (.001)

T A B L E CXLIX

YEARLY RETENTION RATES BY YEAR OF BIRTH OF STUDENTS

"1945"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	2,021	100.0	1,807	89.4	1,353	66.9	1,035	51.2	533	26.4	66	3.3
English	33,037	100.0	31,966	96.8	28,882	87.4	25,254	76.4	18,159	55.0	4,531	13.7
Other	2,244	100.0	2,166	96.5	1,957	87.2	1,762	78.5	1,297	57.8	459	20.5
Total	37,302	100.0	35,939	96.3	32,192	86.3	28,051	75.2	19,989	53.6	5,056	13.6

$$\chi^2 (5th Year) = 298.45 (.001)$$

$$\chi^2 (Grads.) = 237.29 (.001)$$

T A B L E C L

YEARLY RETENTION RATES BY YEAR OF BIRTH OF STUDENTS

"1946, 1947, 1948 AND 1949 OR AFTER"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	852	100.0	817	95.9	702	82.4	628	73.7	364	42.7	81	9.5
English	14,014	100.0	13,882	99.1	13,516	96.4	12,863	91.8	10,743	76.7	4,649	33.2
Other	790	100.0	783	99.1	756	95.7	731	92.5	625	79.1	332	42.0
Total	15,656	100.0	15,482	98.9	14,974	95.6	14,222	90.8	11,732	74.9	5,062	32.3

$$X^2 \text{ (5th Year)} = 125.37 \text{ (.001)}$$

$$X^2 \text{ (Grads.)} = 163.32 \text{ (.001)}$$

T A B L E C L I
YEARLY RETENTION RATES BY NUMBER OF SCHOOLS ATTENDED

"ONE SCHOOL"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	1,898	100.0	1,380	72.7	921	48.5	660	34.8	380	20.0	56	3.0
	F	1,783	100.0	1,293	72.5	803	45.0	555	31.1	183	10.3	45	2.5
	T	3,681	100.0	2,673	72.6	1,724	46.8	1,215	33.0	563	15.2	101	2.8
English	M	25,291	100.0	21,315	84.3	17,728	70.1	14,911	59.0	11,210	44.3	3,005	11.9
	F	24,693	100.0	21,008	85.1	17,027	69.0	13,799	55.9	8,734	35.4	3,488	14.1
	T	49,984	100.0	42,323	84.7	34,755	69.6	28,710	57.5	19,944	39.9	6,493	13.0
Other	M	2,037	100.0	1,730	84.9	1,496	73.4	1,331	65.3	980	48.1	371	18.2
	F	2,031	100.0	1,707	84.0	1,282	63.1	1,071	52.7	654	32.2	319	15.7
	T	4,068	100.0	3,437	84.5	2,778	68.3	2,402	59.0	1,634	40.2	690	17.0
Total	M	29,226	100.0	24,425	83.6	20,145	68.9	16,902	57.8	12,570	43.0	3,432	11.7
	F	28,507	100.0	24,008	84.2	19,109	67.0	15,425	54.1	9,571	33.6	3,852	13.5
	T	57,733	100.0	48,433	83.9	39,257	68.0	32,327	56.0	22,141	38.4	7,284	12.6

χ^2 (5th Year) = 545.04 (.001)

χ^2 (Grads.) = 350.78 (.001)

T A B L E C L I I

YEARLY RETENTION RATES BY NUMBER OF SCHOOLS ATTENDED

"TWO SCHOOLS"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates		
	N	%	N	%	N	%	N	%	N	%	N	%	
French	M	446	100.0	441	98.9	399	89.5	324	72.6	223	50.0	15	3.4
	F	532	100.0	527	99.1	449	84.4	381	71.6	194	36.5	23	4.3
	T	978	100.0	968	99.0	848	87.0	705	72.1	417	43.3	38	3.9
English	M	9,443	100.0	9,395	99.5	8,575	90.8	7,721	81.8	6,134	65.0	1,222	12.9
	F	8,183	100.0	8,128	99.3	7,218	88.2	6,302	77.0	4,346	53.1	1,361	16.6
	T	17,626	100.0	17,523	99.4	15,793	89.5	14,023	79.4	10,480	59.1	2,583	14.8
Other	M	769	100.0	765	99.5	728	94.7	672	87.4	553	71.9	127	16.5
	F	670	100.0	668	99.7	596	89.0	518	77.3	341	50.9	123	18.4
	T	1,439	100.0	1,433	99.6	1,324	91.9	1,190	82.4	894	61.4	250	17.5
Total	M	10,658	100.0	10,601	99.5	9,702	91.0	8,717	81.8	6,910	64.8	1,364	12.8
	F	9,385	100.0	9,323	99.3	8,263	88.0	7,201	76.7	4,881	52.0	1,507	16.1
	T	20,043	100.0	19,924	99.4	17,965	89.6	15,918	79.4	11,791	58.8	2,871	14.3

$$X^2 \text{ (5th Year)} = 47.43 \text{ (.001)}$$

$$X^2 \text{ (Grads.)} = 85.08 \text{ (.001)}$$

T A B L E C L I I I

YEARLY RETENTION RATES BY NUMBER OF SCHOOLS ATTENDED

"THREE SCHOOLS"

1st Year			2nd Year			3rd Year			4th Year			5th Year			Graduates		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	%
French	M	78	100.0	78	100.0	76	97.4	70	89.7	59	75.6	5	6.4				
	F	91	100.0	91	100.0	87	95.6	83	91.2	62	68.1	9	9.9				
	T	169	100.0	169	100.0	163	96.5	153	90.5	121	71.9	14	8.2				
English	M	2,120	100.0	2,112	99.6	2,058	97.1	1,893	89.3	1,558	73.5	156	7.4				
	F	1,532	100.0	1,528	99.7	1,488	97.1	1,363	89.0	1,029	67.2	201	13.1				
	T	3,652	100.0	3,640	99.7	3,546	97.1	3,256	89.2	2,587	70.4	357	10.3				
Other	M	162	100.0	162	100.0	159	98.1	151	93.2	133	82.1	23	14.2				
	F	112	100.0	112	100.0	109	97.3	101	90.2	71	63.4	18	16.1				
	T	274	100.0	274	100.0	268	97.7	252	91.7	204	72.8	41	15.2				
Total	M	2,360	100.0	2,352	99.7	2,293	97.2	2,114	89.6	1,750	74.2	184	7.9				
	F	1,735	100.0	1,731	99.8	1,684	97.1	1,547	89.2	1,162	67.0	228	13.1				
	T	4,095	100.0	4,083	99.7	3,977	97.1	3,661	89.4	2,912	71.1	412	10.1				

$$\chi^2 (5th Year) = .47 (.90)$$

$$\chi^2 (Grads.) = 7.37 (.05)$$

TABLE CLIV

YEARLY RETENTION RATES BY NUMBER OF SCHOOLS ATTENDED

"FOUR SCHOOLS"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	M	13	100.0	13	100.0	13	100.0	13	100.0	13	1	7.7
	F	9	100.0	9	100.0	9	100.0	9	100.0	7	1	11.1
	T	22	100.0	22	100.0	22	100.0	22	100.0	20	2	9.4
English	M	303	100.0	303	100.0	299	98.7	291	96.0	258	10	3.3
	F	195	100.0	195	100.0	192	98.5	184	94.4	146	19	9.7
	T	498	100.0	498	100.0	491	98.6	475	95.2	404	29	6.5
Other	M	32	100.0	32	100.0	30	93.8	29	90.6	26	4	12.5
	F	13	100.0	13	100.0	13	100.0	13	100.0	12	2	15.4
	T	45	100.0	45	100.0	43	96.9	42	95.3	38	6	14.0
Total	M	348	100.0	348	100.0	342	98.3	333	95.7	297	15	4.3
	F	217	100.0	217	100.0	214	98.6	206	94.9	165	22	10.1
	T	565	100.0	565	100.0	556	98.4	539	95.4	462	37	6.5

$$X^2 \text{ (5th Year)} = .29 \text{ (.90)}$$

$$X^2 \text{ (Grads.)} = 3.78 \text{ (.25)}$$

T A B L E C L V
YEARLY RETENTION RATES BY NUMBER OF SCHOOLS ATTENDED
"FIVE OR MORE SCHOOLS"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M		.0		.0		.0		.0		.0		.0
	F		.0		.0		.0		.0		.0		.0
	T		.0		.0		.0		.0		.0		.0
English	M	38	100.0	38	100.0	38	100.0	36	94.7	32	84.2	1	2.6
	F	21	100.0	21	100.0	20	95.2	20	95.2	18	85.7	2	9.5
	T	59	100.0	59	100.0	58	98.3	56	94.9	50	84.7	3	5.1
Other	M	4	100.0	4	100.0	4	100.0	4	100.0	3	75.0		.0
	F	1	100.0	1	100.0	1	100.0	1	100.0	1	100.0		.0
	T	5	100.0	5	100.0	5	100.0	5	100.0	4	80.0		.0
Total	M	42	100.0	42	100.0	42	100.0	40	95.2	35	83.3	1	2.4
	F	22	100.0	22	100.0	21	95.5	21	95.5	19	86.4	2	9.1
	T	64	100.0	64	100.0	63	98.4	61	95.3	54	84.4	3	4.7

$$\chi^2 \text{ (5th Year)} = .01 \text{ (.095)}$$

$$\chi^2 \text{ (Grads.)} = .25 \text{ (.90)}$$

T A B L E CLVI
STAFF QUESTIONNAIRE - YEARLY RETENTION RATES BY RELIABILITY RATING

"MUCH BELOW AVERAGE"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	176	100.0	94	53.4	48	27.3	17	9.7	12	6.8		.0
English	2,682	100.0	1,807	67.4	1,156	42.4	765	28.5	431	16.1	15	.5
Other	139	100.0	91	65.5	58	41.7	46	33.1	28	20.1	2	1.4
Total	2,997	100.0	1,992	66.5	1,242	41.4	828	27.6	471	15.7	15	.5

$$\chi^2 \text{ (5th Year)} = 10.81 \text{ (.005)}$$

$$\chi^2 \text{ (Grads.)} = 3.34 \text{ (.25)}$$

T A B L E CLVII
STAFF QUESTIONNAIRE - YEARLY RETENTION RATES BY RELIABILITY RATING
"BELOW AVERAGE"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	955	100.0	655	68.6	425	44.5	263	27.5	132	13.8	4	.4
English	12,087	100.0	9,735	80.5	7,230	59.8	5,333	44.1	3,423	28.3	175	1.4
Other	739	100.0	589	79.7	440	59.5	349	47.2	236	31.9	19	2.6
Total	13,781	100.0	10,979	79.7	8,095	58.7	5,945	43.1	3,791	27.5	198	1.4

$$\chi^2 \text{ (5th Year)} = 73.19 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 13.52 \text{ (.005)}$$

TABLE CLVIII
STAFF QUESTIONNAIRE - YEARLY RETENTION RATES BY RELIABILITY RATING

"AVERAGE"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	2,170	100.0	1,807	83.3	1,323	61.0	978	45.1	528	24.3	43	2.0
English	29,712	100.0	27,369	92.1	23,126	77.8	19,071	64.2	13,139	44.2	2,047	6.9
Other	2,216	100.0	1,987	89.7	1,677	75.7	1,427	64.4	957	43.2	209	9.4
Total	34,098	100.0	31,163	91.4	26,126	76.6	21,476	63.0	14,624	42.9	2,299	6.7

$$\chi^2 \text{ (5th Year)} = 186.58 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 97.67 \text{ (.001)}$$

T A B L E C L I X

STAFF QUESTIONNAIRE - YEARLY RETENTION RATES BY RELIABILITY RATING

"ABOVE AVERAGE"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	912	100.0	846	92.8	704	77.2	603	66.1	321	35.2	69	7.6
English	18,276	100.0	17,731	97.0	16,324	89.3	14,938	81.7	11,260	61.6	4,271	23.4
Other	1,824	100.0	1,746	95.7	1,547	84.8	1,420	77.9	1,035	56.7	451	24.7
Total	21,012	100.0	20,323	96.7	18,575	88.4	16,961	80.7	12,616	60.0	4,791	22.8

$$\chi^2 \text{ (5th Year)} = 104.55 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 98.39 \text{ (.001)}$$

T A B L E CLX

STAFF QUESTIONNAIRE - YEARLY RETENTION RATES BY RELIABILITY RATING

"MUCH ABOVE AVERAGE"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	245	100.0	228	93.8	206	84.8	190	78.2	109	44.9	38	15.6
English	6,087	100.0	6,011	98.8	5,794	95.2	5,547	91.1	4,600	75.6	2,835	46.6
Other	685	100.0	671	98.0	624	91.1	588	85.8	478	69.8	297	43.4
Total	7,015	100.0	6,910	98.5	6,624	94.4	6,325	90.2	5,187	73.9	3,170	45.2

$$\chi^2 \text{ (5th Year)} = 31.59 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 50.05 \text{ (.001)}$$

T A B L E CLXI

STAFF QUESTIONNAIRE-- YEARLY RETENTION RATES BY CO-OPERATION RATING

"MUCH BELOW AVERAGE"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
French	M	76	100.0	36	47.4	21	27.6	9	11.8	4	5.3	.0
	F	30	100.0	16	53.3	7	23.3	3	10.0	2	6.7	.0
	T	106	100.0	52	50.4	28	25.5	12	10.9	6	6.0	.0
English	M	1,206	100.0	826	68.5	561	46.5	395	32.8	225	18.7	.6
	F	508	100.0	314	61.8	182	35.8	118	23.2	55	10.8	1.0
	T	1,714	100.0	1,140	65.2	743	41.2	513	28.0	280	14.8	.8
Other	M	54	100.0	37	68.5	23	42.6	20	37.0	10	18.5	3.7 ²⁵⁸
	F	32	100.0	19	59.4	7	21.9	4	12.5	3	9.4	.0
	T	86	100.0	56	64.0	30	32.3	24	24.8	13	14.0	1.9
Total	M	1,336	100.0	899	67.3	605	45.3	424	31.7	239	17.9	.8
	F	570	100.0	349	61.2	196	34.4	125	21.9	60	10.5	.9
	T	1,906	100.0	1,248	65.5	801	42.0	549	28.8	299	15.7	.7

$$\chi^2 \text{ (5th Year)} = 7.26 \text{ (.05)}$$

$$\chi^2 \text{ (Grads.)} = 3.77 \text{ (.25)}$$

T A B L E C L X I I

STAFF QUESTIONNAIRE - YEARLY RETENTION RATES BY CO-OPERATION RATING

"BELOW AVERAGE"

	1st Year.		2nd Year		3rd Year		4th Year		5th Year		Graduates		
	N	%	N	%	N	%	N	%	N	%	N	%	
French	M	422	100.0	289	68.5	192	45.5	122	28.9	70	16.6	3	.7
	F	241	100.0	157	65.1	83	34.4	58	24.1	25	10.4	2	.8
	T	663	100.0	446	66.8	275	40.0	180	26.5	95	13.5	5	.8
English	M	5,201	100.0	4,222	81.2	3,209	61.7	2,463	47.4	1,728	33.2	99	1.9
	F	3,045	100.0	2,317	76.1	1,575	51.7	1,072	35.2	568	18.7	66	2.2
	T	8,246	100.0	6,539	78.7	4,784	56.7	3,535	41.3	2,296	26.0	165	2.1
Other	M	307	100.0	245	79.8	200	65.1	168	54.7	126	41.0	12	3.9
	F	195	100.0	145	74.4	93	47.7	66	33.8	34	17.4	6	3.1
	T	502	100.0	390	77.1	293	56.4	234	44.3	160	29.2	18	3.5
Total	M	5,930	100.0	4,756	80.2	3,601	60.7	2,753	46.4	1,924	32.4	114	1.9
	F	3,481	100.0	2,619	75.2	1,751	50.3	1,196	34.4	627	18.0	74	2.1
	T	9,411	100.0	7,375	78.4	5,352	56.9	3,949	42.0	2,551	27.1	188	2.0

$$\chi^2 \text{ (5th Year)} = 45.79 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 11.47 \text{ (.005)}$$

TABLE CLXIII

STAFF QUESTIONNAIRE - YEARLY RETENTION RATES BY CO-OPERATION RATING

"AVERAGE"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates		
	N	%	N	%	N	%	N	%	N	%	N	%	
French	M	1,119	100.0	903	80.7	692	61.8	502	44.9	313	28.0	21	1.9
	F	1,148	100.0	931	81.1	647	56.4	477	41.6	217	18.9	23	2.0
	T	2,267	100.0	1,834	80.9	1,339	59.1	979	43.3	530	23.5	44	2.0
English	M	16,365	100.0	14,974	91.5	12,804	78.2	10,780	65.9	8,003	48.9	1,042	6.4
	F	14,410	100.0	12,806	88.9	10,257	71.2	7,995	55.5	4,806	33.4	955	6.6
	T	30,775	100.0	27,780	90.2	23,061	74.7	18,775	60.7	12,809	41.2	1,997	6.5
Other	M	1,193	100.0	1,071	89.8	949	79.5	835	70.0	624	52.3	124	10.4
	F	1,065	100.0	924	86.8	711	66.8	571	53.6	326	30.6	92	8.6
	T	2,258	100.0	1,995	88.3	1,660	73.2	1,406	61.8	950	41.5	216	9.5
Total	M	18,677	100.0	16,948	90.7	14,445	77.3	12,117	64.9	8,940	47.9	1,187	6.4
	F	16,623	100.0	14,661	88.2	11,615	69.9	9,043	54.4	5,349	32.2	1,070	6.4
	T	35,300	100.0	31,609	89.5	26,060	73.8	21,160	59.9	14,289	40.5	2,257	6.4

$$\chi^2 \text{ (5th Year)} = 175.10 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 106.28 \text{ (.001)}$$

TABLE CLXIV

STAFF QUESTIONNAIRE - YEARLY RETENTION RATES BY CO-OPERATION RATING

"ABOVE AVERAGE"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates		
	N	%	N	%	N	%	N	%	N	%	N	%	
French	M	451	100.0	418	92.7	359	79.6	305	67.6	210	46.6	40	8.9
	F	632	100.0	572	90.5	436	69.0	340	53.8	134	21.2	29	4.6
	T	1,083	100.0	990	91.6	795	74.3	645	60.7	344	33.9	69	6.8
English	M	9,860	100.0	9,515	96.5	8,829	89.5	8,103	82.2	6,612	67.1	2,006	20.3
	F	11,275	100.0	10,828	96.0	9,675	85.8	8,539	75.7	5,813	51.6	2,275	20.2
	T	21,135	100.0	20,343	96.3	18,504	87.7	16,642	79.0	12,425	59.4	4,281	20.3
Other	M	984	100.0	947	96.2	876	89.0	814	82.7	636	64.6	238	24.2
	F	980	100.0	928	94.7	774	79.0	683	69.7	448	45.7	195	19.9
	T	1,964	100.0	1,875	95.5	1,650	84.0	1,497	76.2	1,084	55.2	433	22.1
Total	M	11,295	100.0	10,880	96.3	10,064	89.1	9,222	81.6	7,458	66.0	2,284	20.2
	F	12,887	100.0	12,328	95.7	10,885	84.5	9,562	74.2	6,395	49.5	2,499	19.4
	T	24,182	100.0	23,208	96.0	20,949	86.6	18,784	77.7	13,853	57.3	4,783	19.8

$$\chi^2 \text{ (5th Year)} = 132.97 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 105.96 \text{ (.001)}$$

T A B L E CLXV

STAFF QUESTIONNAIRE - YEARLY RETENTION RATES BY CO-OPERATION RATING

"MUCH ABOVE AVERAGE"

	1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates		
	N	%	N	%	N	%	N	%	N	%	N	%	
ench	M	136	100.0	129	94.9	116	85.3	105	77.2	64	47.1	13	9.6
	F	200	100.0	179	89.5	153	76.5	130	65.0	63	31.5	23	11.5
	T	336	100.0	308	92.2	269	80.9	235	71.1	127	39.3	36	10.6
glish	M	2,901	100.0	2,852	98.3	2,724	93.9	2,632	90.7	2,264	78.0	1,191	41.1
	F	4,095	100.0	4,023	98.2	3,813	93.1	3,575	87.3	2,797	68.3	1,599	41.5
	T	6,996	100.0	6,875	98.3	6,537	93.5	6,207	89.0	5,061	73.2	2,890	41.3
her	M	354	100.0	345	97.5	336	94.9	321	90.7	278	78.5	145	41.0
	F	441	100.0	425	96.4	380	86.2	351	79.6	252	57.1	166	37.6
	T	795	100.0	770	97.0	716	90.6	672	85.2	530	67.8	311	39.3
tal	M	3,391	100.0	3,326	98.1	3,176	93.7	3,058	90.2	2,606	76.9	1,349	39.8
	F	4,736	100.0	4,627	97.7	4,346	91.8	4,056	85.6	3,112	65.7	1,888	39.9
	T	8,127	100.0	7,953	97.9	7,522	92.6	7,114	87.5	5,718	70.4	3,237	39.8

$$\chi^2 (5th Year) = 56.08 (.001)$$

$$\chi^2 (Grads.) = 75.46 (.001)$$

T A B L E CLXVI
STAFF QUESTIONNAIRE - YEARLY RETENTION RATES BY INDUSTRY RATING

"MUCH BELOW AVERAGE"

1st Year			2nd Year			3rd Year			4th Year			5th Year			Graduates		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	%
French	M	158	100.0	69	50.0	43	51.2	21	15.2	9	6.5	9	6.5	9	6.5	9	6.5
	F	68	100.0	28	41.2	15	22.1	6	8.8	3	4.4	3	4.4	3	4.4	3	4.4
	T	206	100.0	97	45.6	58	26.7	27	12.0	12	5.5	12	5.5	12	5.5	12	5.5
English	M	2,308	100.0	1,591	68.9	1,084	47.0	721	31.2	428	18.5	428	18.5	428	18.5	428	18.5
	F	975	100.0	615	63.1	344	35.3	205	21.0	102	10.5	102	10.5	102	10.5	102	10.5
	T	3,283	100.0	2,206	66.0	1,428	41.2	926	26.1	530	14.5	530	14.5	530	14.5	530	14.5
Other	M	101	100.0	70	69.3	47	46.5	39	38.6	24	23.8	24	23.8	24	23.8	24	23.8
	F	52	100.0	33	63.5	16	30.8	11	21.2	4	7.7	4	7.7	4	7.7	4	7.7
	T	153	100.0	103	66.4	63	38.7	50	29.9	28	15.8	28	15.8	28	15.8	28	15.8
Total	M	2,547	100.0	1,730	67.9	1,174	46.1	781	30.7	461	18.1	461	18.1	461	18.1	461	18.1
	F	1,095	100.0	676	61.7	375	34.2	222	20.3	109	10.0	109	10.0	109	10.0	109	10.0
	T	3,642	100.0	2,406	66.1	1,549	42.5	1,003	27.5	570	15.7	570	15.7	570	15.7	570	15.7

$$\chi^2 \text{ (5th Year)} = 13.90 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 1.08 \text{ (.75)}$$

T A B L E CLXVII

STAFF QUESTIONNAIRE - YEARLY RETENTION RATES BY INDUSTRY RATING

"BELOW AVERAGE"

1st Year			2nd Year			3rd Year			4th Year			5th Year			Graduates		
	N	%	N	%		N	%		N	%		N	%		N	%	
French	M	618	100.0	437	70.7	287	46.4	181	29.3	114	18.4	5	.5				
	F	410	100.0	282	68.8	143	34.9	79	19.3	37	9.0		.0				
	T	1,028	100.0	719	69.8	430	40.7	260	24.3	151	13.7	5	.3				
English	M	8,653	100.0	7,315	84.5	5,728	66.2	4,505	52.1	3,187	36.8	170	2.0				
	F	5,429	100.0	4,301	79.2	2,996	55.2	2,048	37.7	1,091	20.1	96	1.8				
	T	14,082	100.0	11,616	81.9	8,724	60.7	6,553	44.9	4,278	28.5	266	1.9				
Other	M	508	100.0	409	80.5	336	66.1	272	53.5	203	40.0	19	3.7				
	F	327	100.0	252	77.1	161	49.2	110	33.6	66	20.2	3	1.5				
	T	835	100.0	661	78.8	497	57.7	382	43.6	269	30.1	24	2.6				
Total	M	9,779	100.0	8,161	83.5	6,351	64.9	4,958	50.7	3,504	35.8	192	2.0				
	F	6,166	100.0	4,835	78.4	3,300	53.5	2,237	36.3	1,194	19.4	101	1.6				
	T	15,945	100.0	12,996	81.5	9,651	60.5	7,195	45.1	4,698	29.5	293	1.3				

$$\chi^2 \text{ (5th Year)} = 82.32 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 18.45 \text{ (.001)}$$

TABLE CLXVIII

STAFF QUESTIONNAIRE - YEARLY RETENTION RATES BY INDUSTRY RATING

"AVERAGE"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	945	100.0	795	84.1	630	66.7	469	49.6	295	31.2	20	2.1
	F	1,044	100.0	874	83.7	626	60.0	473	45.3	215	20.4	26	2.5
	T	1,989	100.0	1,669	83.9	1,256	63.4	942	47.5	508	25.8	46	2.3
English	M	14,736	100.0	13,839	93.9	12,193	82.7	10,533	71.5	8,004	54.3	1,127	7.6
	F	15,726	100.0	12,499	91.1	10,307	75.1	8,196	59.7	4,950	36.1	919	5.7
	T	28,462	100.0	26,338	92.5	22,500	78.9	18,729	65.6	12,954	45.2	2,046	7.2
Other	M	1,102	100.0	1,018	92.4	908	82.4	814	73.9	610	55.4	126	11.3
	F	977	100.0	856	87.6	672	68.8	540	55.3	295	30.2	80	8.2
	T	2,079	100.0	1,874	90.0	1,580	75.6	1,354	64.6	905	42.8	206	9.8
Total	M	16,783	100.0	15,652	93.3	13,731	81.8	11,816	70.4	8,909	53.1	1,271	7.6
	F	15,747	100.0	14,229	90.4	11,605	73.7	9,209	58.5	5,458	34.7	1,025	6.5
	T	32,530	100.0	29,881	91.9	25,336	77.9	21,025	64.6	14,367	44.2	2,296	7.1

$$\chi^2 \text{ (5th Year)} = 168.12 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 86.49 \text{ (.001)}$$

T A B L E CLXIX

STAFF QUESTIONNAIRE - YEARLY RETENTION RATES BY INDUSTRY RATING

"ABOVE AVERAGE"

1st Year			2nd Year			3rd Year			4th Year			5th Year			Graduates		
	N	%	N	%		N	%		N	%		N	%		N	%	
French	M	375	100.0	352	93.9	308	82.1	269	71.7	181	48.3	37	9.9				
	F	559	100.0	507	90.7	403	72.1	331	59.2	142	25.4	32	5.7				
	T	934	100.0	859	92.3	711	77.1	600	65.5	323	36.9	69	7.8				
English	M	7,554	100.0	7,382	97.7	6,946	92.0	6,498	86.0	5,367	71.0	1,933	25.6				
	F	9,553	100.0	9,270	97.0	8,394	87.9	7,567	79.2	5,256	55.0	2,235	23.4				
	T	17,107	100.0	16,652	97.4	15,340	90.0	10,465	82.6	10,623	63.0	4,168	24.5				
Other	M	871	100.0	843	96.8	793	91.0	741	85.1	586	67.3	299	26.3				
	F	910	100.0	866	95.2	738	81.1	665	73.1	445	48.9	206	22.6				
	T	1,781	100.0	1,709	96.0	1,531	86.1	1,406	79.1	1,031	58.1	505	24.5				
Total	M	8,800	100.0	8,577	97.5	8,047	91.4	7,508	85.3	6,134	69.7	2,269	25.8				
	F	11,022	100.0	10,643	96.6	9,535	86.5	8,563	77.7	5,843	53.0	2,473	22.4				
	T	19,822	100.0	19,220	97.0	17,582	88.7	12,471	62.9	11,977	60.4	4,742	23.9				

$$\chi^2 \text{ (5th Year)} = 113.04 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 122.76 \text{ (.001)}$$

TABLE CLXX

STAFF QUESTIONNAIRE - YEARLY RETENTION RATES BY INDUSTRY RATING

"MUCH ABOVE AVERAGE"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	128	100.0	122	95.3	112	87.5	103	80.5	62	48.4	17	13.3
	F	169	100.0	163	96.4	138	81.7	118	69.8	46	27.2	19	11.2
	T	297	100.0	285	95.9	250	84.6	221	75.2	108	37.8	36	12.3
English	M	2,275	100.0	2,255	99.1	2,171	95.4	2,111	92.8	1,839	80.8	1,105	48.6
	F	3,645	100.0	3,597	98.7	3,456	94.8	3,280	90.0	2,633	72.4	1,745	47.8
	T	5,920	100.0	5,852	98.9	5,627	95.1	5,391	91.4	4,477	76.6	2,848	48.2
Other	M	310	100.0	305	98.4	300	96.8	292	94.2	251	81.0	148	47.7
	F	447	100.0	434	97.1	378	84.6	348	77.9	252	56.4	163	37.6
	T	757	100.0	739	97.8	678	90.7	640	86.1	503	68.7	316	42.7
Total	M	2,713	100.0	2,682	98.9	2,583	95.2	2,506	92.4	2,152	79.3	1,270	46.8
	F	4,261	100.0	4,194	98.4	3,972	93.2	3,746	87.9	2,936	68.9	1,930	45.3
	T	6,974	100.0	6,876	98.6	6,555	94.0	6,252	89.6	5,088	73.0	3,200	45.9

$$\chi^2 \text{ (5th Year)} = 64.68 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 82.99 \text{ (.001)}$$

T A B L E CLXXI

STAFF QUESTIONNAIRE - YEARLY RETENTION RATES BY ENERGY RATING

"MUCH BELOW AVERAGE"

1st Year			2nd Year			3rd Year			4th Year			5th Year			Graduates		
	N	%	N	%		N	%		N	%		N	%		N	%	
French	M	63	100.0	34	54.0	19	30.2	11	17.5	5	7.9						
	F	43	100.0	26	60.5	16	37.2	4	9.3	1	2.3						
	T	106	100.0	60	57.3	35	33.7	15	13.4	6	5.1						
English	M	861	100.0	661	76.8	503	58.4	397	46.1	271	31.5	36	4.2				
	F	690	100.0	494	71.6	321	46.5	226	32.8	125	18.1	19	2.8				
	T	1,551	100.0	1,155	74.2	824	52.5	623	39.5	396	24.8	55	3.5				
Other	M	31	100.0	21	67.7	17	54.8	13	41.9	8	25.8	2	6.5				
	F	30	100.0	22	73.3	13	43.3	11	36.7	3	10.0						
	T	61	100.0	43	70.5	30	49.1	24	39.3	11	17.9	2	3.3				
Total	M	955	100.0	716	75.0	539	56.4	421	44.1	284	29.7	38	4.0				
	F	763	100.0	542	71.0	350	45.9	241	31.6	129	16.9	19	2.5				
	T	1,718	100.0	1,258	73.2	889	51.7	662	38.5	413	24.0	57	3.3				

$$\chi^2 \text{ (5th Year)} = 17.25 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 5.76 \text{ (.25)}$$

T A B L E CLXXII

STAFF QUESTIONNAIRE - YEARLY RETENTION RATES BY ENERGY RATING

"BELOW AVERAGE"

1st Year			2nd Year			3rd Year			4th Year			5th Year			Graduates		
N	%		N	%		N	%		N	%		N	%		N	%	
French	M	307	100.0	274	70.8	185	47.8	124	32.0	84	21.7	4	1.0				
	F	345	100.0	262	76.4	156	45.5	105	30.6	49	14.3	5	1.5				
	T	750	100.0	536	73.6	341	46.7	229	31.3	133	18.0	9	1.5				
English	M	5,075	100.0	4,348	85.7	3,542	69.8	2,869	56.6	2,151	42.0	232	5.6				
	F	4,814	100.0	3,955	81.7	2,969	61.7	2,235	46.4	1,315	27.5	253	4.9				
	T	9,887	100.0	8,283	83.7	6,511	65.8	5,104	51.5	3,446	34.7	520	5.5				
Other	M	272	100.0	226	83.1	186	68.4	159	58.5	114	41.9	17	6.5				
	F	290	100.0	245	83.8	187	64.5	141	48.6	80	27.6	15	4.5				
	T	562	100.0	469	83.5	373	66.5	300	53.6	194	34.8	30	5.4				
Total	M	5,752	100.0	4,848	84.6	3,913	68.3	3,152	55.0	2,329	40.6	305	5.5				
	F	5,447	100.0	4,440	81.5	3,312	60.8	2,481	45.5	1,444	26.5	256	4.7				
	T	11,179	100.0	9,288	83.1	7,225	64.6	5,633	50.4	3,773	33.8	559	5.0				

$$\chi^2 \text{ (5th Year)} = 55.84 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 22.18 \text{ (.001)}$$

TABLE CLXXIII

STAFF QUESTIONNAIRE - YEARLY RETENTION RATES BY ENERGY RATING

"AVERAGE"

1st Year			2nd Year			3rd Year			4th Year			5th Year			Graduates		
	N	%	N	%		N	%		N	%		N	%		N	%	
French	M	1,245	100.0	1,025	82.3	814	65.4	607	48.8	370	29.7	37	3.0				
	F	1,555	100.0	1,113	82.3	805	59.5	606	44.8	284	21.0	40	3.0				
	T	2,598	100.0	2,138	82.3	1,619	62.5	1,213	46.8	654	25.4	77	3.0				
English	M	19,954	100.0	18,263	91.6	15,837	79.4	13,634	68.4	10,567	52.0	2,000	10.0				
	F	18,396	100.0	16,814	91.4	14,073	76.5	11,550	62.8	7,402	40.2	2,182	11.9				
	T	38,350	100.0	35,077	91.5	29,910	78.0	25,184	65.6	17,969	46.1	4,182	11.0				
Other	M	1,577	100.0	1,442	91.4	1,290	81.8	1,160	73.6	865	54.9	231	14.6				
	F	1,501	100.0	1,331	88.7	1,062	70.8	900	60.0	565	37.6	221	14.7				
	T	3,078	100.0	2,773	90.1	2,352	76.3	2,060	66.8	1,430	46.3	452	14.7				
Total	M	22,756	100.0	20,730	91.1	17,941	78.8	15,401	67.7	11,602	51.0	2,268	10.0				
	F	21,250	100.0	19,258	90.6	15,940	75.0	13,056	61.4	8,251	38.8	2,443	11.5				
	T	44,006	100.0	39,988	90.9	33,881	77.0	28,457	64.7	19,853	45.1	4,711	10.7				

$$\chi^2 \text{ (5th Year)} = 245.36 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 192.48 \text{ (.001)}$$

T A B L E CLXXIV

STAFF QUESTIONNAIRE - YEARLY RETENTION RATES BY ENERGY RATING

"ABOVE AVERAGE"

1st Year			2nd Year			3rd Year			4th Year			5th Year			Graduates		
	N	%	N	%		N	%		N	%		N	%		N	%	
French	M	400	100.0	349	87.3	277	69.3	226	56.5	156	39.5	27	6.8				
	F	393	100.0	351	88.2	267	67.1	224	56.3	85	21.4	23	5.8				
	T	793	100.0	700	87.8	544	68.2	450	56.4	243	30.5	50	6.3				
English	M	7,768	100.0	7,300	94.0	6,593	84.9	5,922	76.2	4,792	61.7	1,490	19.2				
	F	7,504	100.0	7,182	95.7	6,425	85.6	5,729	76.3	4,007	53.4	1,858	24.8				
	T	15,272	100.0	14,482	94.9	13,018	85.5	11,651	76.3	8,799	57.6	3,348	22.0				
Other	M	797	100.0	749	94.0	701	88.0	647	81.2	542	68.0	210	26.5				
	F	708	100.0	668	94.4	550	77.7	483	68.2	315	44.5	156	22.0				
	T	1,505	100.0	1,417	94.2	1,251	82.9	1,130	74.7	857	56.3	366	24.2				
Total	M	8,965	100.0	8,398	93.7	7,571	84.5	6,795	75.8	5,492	61.3	1,727	19.3				
	F	8,610	100.0	8,201	95.2	7,242	84.1	6,456	74.8	4,407	51.2	2,057	23.7				
	T	17,575	100.0	16,599	94.4	14,813	84.3	13,251	75.3	9,899	56.3	3,784	21.4				

$$\chi^2 \text{ (5th Year)} = 99.46 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 95.27 \text{ (.001)}$$

T A B L E CLXXV

STAFF QUESTIONNAIRE - YEARLY RETENTION RATES BY ENERGY RATING

"MUCH ABOVE AVERAGE"

1st Year			2nd Year			3rd Year			4th Year			5th Year			Graduates		
N	%		N	%		N	%		N	%		N	%		N	%	
French																	
M	103	100.0	94	87.0		85	78.7		75	69.4		44	40.7		9	8.3	
F	115	100.0	101	89.4		81	71.7		68	60.2		22	19.5		9	8.0	
T	221	100.0	195	88.2		166	75.2		143	64.8		66	30.1		18	8.2	
English																	
M	1,321	100.0	1,752	96.2		1,599	87.8		1,509	82.9		1,241	68.1		553	29.4	
F	1,856	100.0	1,778	96.8		1,657	90.5		1,519	82.7		1,166	63.5		691	37.6	
T	3,657	100.0	3,530	96.5		3,256	89.1		3,028	82.8		2,407	65.8		1,226	33.5	
Other																	
M	204	100.0	197	96.6		181	88.7		171	83.8		138	67.6		60	29.4	
F	174	100.0	168	96.6		151	86.8		137	78.7		99	56.9		69	39.7	
T	378	100.0	365	96.6		332	87.8		308	81.5		237	62.3		129	34.6	
Total																	
M	2,153	100.0	2,045	95.8		1,865	87.4		1,755	82.5		1,423	66.7		604	28.3	
F	2,123	100.0	2,047	96.4		1,889	89.0		1,724	81.2		1,287	60.6		769	36.2	
T	4,256	100.0	4,090	96.1		3,754	88.2		3,479	81.7		2,710	63.7		1,373	32.5	

$$\chi^2 (5th Year) = 42.37 (.001)$$

$$\chi^2 (Grads.) = 42.06 (.001)$$

STAFF QUESTIONNAIRE - YEARLY RETENTION RATES BY TEACHERS' ESTIMATES OF STUDENTS' CHANCES FOR GRADE 13 SUCCESS

"MUCH BELOW AVERAGE"

1st Year			2nd Year			3rd Year			4th Year			5th Year			Graduates		
	N	%	N	%		N	%		N	%		N	%		N	%	
French	M	778	100.0	498	64.0	329	42.3	189	24.3	100	12.9						.0
	F	531	100.0	343	64.6	169	31.8	87	16.4	36	6.8				2		.4
	T	1,309	100.0	841	64.3	498	37.1	276	20.4	136	9.9				2		.2
English	M	9,645	100.0	7,518	77.9	5,275	54.7	3,742	38.8	2,256	23.4				30		.3
	F	7,756	100.0	5,868	75.7	3,660	47.2	2,267	29.2	1,029	13.3				24		.3
	T	17,401	100.0	13,386	76.8	8,935	51.0	6,009	34.0	3,285	18.4				54		.3
Other	M	575	100.0	442	76.9	326	56.7	253	44.0	154	26.8				6		1.0
	F	565	100.0	428	75.8	257	45.5	175	31.0	76	13.5				2		.4
	T	1,140	100.0	870	76.4	583	51.1	428	37.5	230	20.2				8		.7
Total	M	10,998	100.0	8,458	76.9	5,930	53.9	4,184	38.0	2,510	22.8				36		.3
	F	8,852	100.0	6,639	75.0	4,086	46.2	2,529	28.6	1,141	12.9				28		.3
	T	19,850	100.0	15,097	76.1	10,016	50.5	6,713	33.8	3,651	18.4				64		.3

$$\chi^2 \text{ (5th Year)} = 49.78 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 6.34 \text{ (.05)}$$

STAFF QUESTIONNAIRE - YEARLY RETENTION RATES BY TEACHERS' ESTIMATES OF STUDENTS' CHANCES FOR GRADE 13 SUCCESS

"BELOW AVERAGE"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	666	100.0	555	83.3	421	63.2	304	45.6	190	28.5	7	1.1
	F	634	100.0	503	79.3	339	53.5	229	36.1	106	16.7	4	.6
	T	1,300	100.0	1,058	81.3	760	58.4	533	40.9	296	22.6	11	.9
English	M	10,350	100.0	9,587	92.6	8,227	79.5	6,857	66.3	4,885	47.2	223	2.2
	F	9,389	100.0	8,550	91.1	6,915	73.7	5,336	56.8	2,899	30.9	238	2.5
	T	19,739	100.0	18,137	91.9	15,142	76.6	12,193	61.6	7,784	39.1	461	2.4
Other	M	721	100.0	645	89.5	578	80.2	502	69.6	358	49.7	36	5.0
	F	677	100.0	594	87.7	446	65.9	350	51.7	185	27.3	27	4.0
	T	1,398	100.0	1,239	88.6	1,024	73.1	852	60.7	543	38.5	63	4.5
Total	M	11,737	100.0	10,787	91.9	9,226	78.6	7,663	65.3	5,433	46.3	266	2.3
	F	10,700	100.0	9,647	90.2	7,700	72.0	5,915	55.3	3,190	29.8	269	2.5
	T	22,437	100.0	20,434	91.1	16,926	75.4	13,578	60.5	8,623	38.4	535	2.4

$$\chi^2 \text{ (5th Year)} = 88.21 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 39.50 \text{ (.001)}$$

T A B L E CLXXVIII

STAFF QUESTIONNAIRE - YEARLY RETENTION RATES BY TEACHERS' ESTIMATES OF STUDENTS' CHANCES FOR GRADE 13 SUCCESS

"AVERAGE"

		1st Year		2nd Year		3rd Year		4th Year		5th Year		Graduates	
		N	%	N	%	N	%	N	%	N	%	N	%
French	M	491	100.0	462	94.1	391	79.6	323	65.8	213	43.4	26	5.3
	F	719	100.0	654	91.0	512	71.2	415	57.7	187	26.0	26	3.6
	T	1,210	100.0	1,116	92.6	903	75.4	738	61.8	400	34.7	52	4.5
English	M	8,929	100.0	8,735	97.8	8,237	92.2	7,563	84.7	6,159	69.0	1,129	12.6
	F	8,493	100.0	8,290	97.6	7,603	89.5	6,711	79.0	4,471	52.6	1,233	14.5
	T	17,422	100.0	17,025	97.7	15,840	90.9	14,274	81.9	10,630	60.8	2,362	13.6
Other	M	842	100.0	812	96.4	758	90.0	704	83.6	557	66.2	147	17.5
	F	768	100.0	731	95.2	636	82.8	560	72.9	346	45.1	129	16.8
	T	1,610	100.0	1,543	95.8	1,394	86.4	1,264	78.3	903	55.7	276	17.2
Total	M	10,262	100.0	10,009	97.5	9,386	91.5	8,590	83.7	6,929	67.5	1,302	12.7
	F	9,980	100.0	9,675	96.9	8,751	87.7	7,686	77.0	5,004	50.1	1,388	13.9
	T	20,242	100.0	19,684	97.2	18,137	89.6	16,276	80.4	11,933	59.0	2,690	13.3

$$\chi^2 (5th Year) = 152.43 (.001)$$

$$\chi^2 (Grads.) = 92.55 (.001)$$

T A B L E CLXXIX

STAFF QUESTIONNAIRE - YEARLY RETENTION RATES BY TEACHERS' ESTIMATES OF STUDENTS' CHANCES FOR GRADE 13 SUCCESS

"ABOVE AVERAGE"

1st Year			2nd Year			3rd Year			4th Year			5th Year			Graduates		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	%
French	M	213	100.0	207	97.2	186	87.3	175	82.2	128	60.1	35	16.4				
	F	275	100.0	266	96.7	228	82.9	202	73.5	86	31.3	31	11.3				
	T	488	100.0	473	97.0	414	85.1	377	77.9	214	45.7	66	13.9				
English	M	4,720	100.0	4,678	99.1	4,568	96.8	4,423	95.7	3,907	82.8	1,817	38.5				
	F	5,148	100.0	5,109	99.2	4,940	96.0	4,699	91.3	3,695	71.8	2,043	39.7				
	T	9,868	100.0	9,787	99.2	9,508	96.4	9,122	92.5	7,602	77.3	3,860	39.1				
Other	M	568	100.0	563	99.1	542	95.4	522	91.9	445	78.3	212	37.3				
	F	467	100.0	460	98.5	424	90.8	395	84.6	304	65.1	181	38.8				
	T	1,035	100.0	1,023	98.8	966	93.1	917	88.3	749	71.7	393	38.1				
Total	M	5,501	100.0	5,448	99.0	5,296	96.3	5,120	93.1	4,480	81.4	2,064	37.5				
	F	5,890	100.0	5,835	99.1	5,592	94.9	5,296	89.9	4,085	69.4	2,255	38.3				
	T	11,391	100.0	11,283	99.1	10,888	95.6	10,416	91.4	8,565	75.2	4,319	37.9				

$$\chi^2 \text{ (5th Year)} = 69.30 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 80.32 \text{ (.001)}$$

T A B L E C L X X X

STAFF QUESTIONNAIRE - YEARLY RETENTION RATES BY TEACHERS' ESTIMATES OF STUDENTS' CHANCES FOR GRADE 13 SUCCESS

"MUCH ABOVE AVERAGE"

1st Year			2nd Year			3rd Year			4th Year			5th Year			Graduates		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	%
French	M	55	100.0	96.4	52	94.5	51	92.7	29	52.7	9	16.4					
	F	86	100.0	96.5	76	88.4	73	84.9	26	30.2	14	16.3					
	T	141	100.0	96.5	128	91.5	124	88.8	55	41.5	23	16.4					
English	M	1,769	100.0	99.3	1,729	97.7	1,714	96.9	1,573	88.9	1,140	64.4					
	F	2,265	100.0	99.2	2,215	97.8	2,157	95.2	1,890	83.4	1,442	63.7					
	T	4,034	100.0	99.3	3,944	97.8	3,871	96.1	3,463	86.2	2,582	64.1					
Other	M	176	100.0	100.0	175	99.4	172	97.7	156	88.6	119	67.6					
	F	212	100.0	98.6	193	91.0	186	87.7	151	71.2	119	56.1					
	T	388	100.0	99.3	368	95.2	358	92.7	307	79.9	238	61.9					
Total	M	2,000	100.0	99.3	1,956	97.8	1,937	96.9	1,758	87.9	1,268	63.4					
	F	2,563	100.0	99.1	2,484	96.9	2,416	94.3	2,067	80.6	1,575	61.5					
	T	4,563	100.0	99.2	4,440	97.3	4,353	95.4	3,825	83.8	2,843	62.3					

$$\chi^2 \text{ (5th Year)} = 36.77 \text{ (.001)}$$

$$\chi^2 \text{ (Grads.)} = 49.80 \text{ (.001)}$$

CORRELATIONS OBTAINED IN THE DEVELOPMENT OF MULTIPLE REGRESSION EQUATIONS
EMPLOYED TO FILL IN MISSING DATA REQUIRED FOR MULTIPLE DISCRIMINANT ANALYSIS

FUTURE EDUCATIONAL PLANS

NUMBER OF STUDENTS USED IN THE COMPUTATION
OF CORRELATION COEFFICIENTS INVOLVING
ACHIEVEMENT AND APTITUDE TESTS

TEST					NUMBER		
					French	English	Other
CAAT	1959	Grade 9	I		4501	68640	5583
Canadian Academic Aptitude Test			II		4502	68525	5594
			III		4481	68371	5591
CEAT	1959	Grade 9	I		4336	67934	5534
Canadian English Achievement Test			II		4313	67772	5524
			III		4302	67677	5510
CMAT	1959	Grade 9	I		4308	67548	5516
Canadian Mathematics Achievement Test			II		4309	67670	5524
			III		4292	67492	5515
CATE	1961	Grade 10			2355	43553	3831
Canadian Achievement Test in English							
CATF	1961	Grade 10			2136	30963	2661
Canadian Achievement Test in French							
CATM	1961	Grade 10			2181	38975	3445
Canadian Achievement Test in Mathematics							
CTGI	1961	Grade 10			2396	44340	3946
Canadian Test of General Information							
CPTO	1962	Grade 11			789	22552	1936
Canadian Physics Test (Ontario Edition)							
CGTO	1962	Grade 11			765	21690	1847
Canadian Geometry Test (Ontario Edition)							
SATO	1963	Grade 12	V-I		1080	27257	2694
Scholastic Aptitude Test (Ontario Edition)			V-II		1078	27256	2692
			Total		1060	27258	2694
			Math		1077	27240	2691
TESU	1963	Grade 12			1051	26523	2600
Test in English Structure and Usage							

NUMBER OF STUDENTS USED IN THE COMPUTATION OF CORRELATION COEFFICIENTS
INVOLVING GRADE 9 MARKS AND VARIABLES
OBTAINED FROM THE STUDENT AND STAFF QUESTIONNAIRE

VARIABLE		NUMBER		
		French	English	Other
LENGTH OF TIME IN SCHOOL		4850	71700	5845
Staff Rating Grade 9	Reliability	4456	68739	5603
	Cooperation	4455	68761	5605
	Industry	4454	68749	5605
	Energy	4453	68592	5584
	Chance of 13	4448	68360	5571
Age Entering Elementary School		4390	67711	5428
Size of Municipality		4850	71700	5831
Year of Birth		4829	71448	5807
Number of Children in Family		4778	70974	5772
Extent of Fathers' Education		4309	61808	4858
Extent of Mothers' Education		4361	62604	4930
Future Educational Plans Grade 9	Parents' Suggestions	4741	70054	5712
	Teachers' Suggestions	4250	59031	4768
	Friends' Plans	4441	65059	5249
	Own Plans	4751	70304	5715
1st Year Marks	Mathematics	4185	65199	5182
	English	4217	65579	5214
	Average	3636	57740	4630
Future Educational Plans Grade 12	Parents' Suggestions	1336	30287	2625
	Teachers' Suggestions	1151	26345	2228
	Friends' Plans	1266	29108	2486
	Own Plans	1341	30248	2620
Staff Rating Grade 12	Reliability	1351	30584	2663
	Cooperation	1353	30612	2662
	Industry	1330	29609	2556
	Energy	1356	30772	2686
	Capacity for 13	1352	30622	2665
	Motivation for 13	1354	30577	2662
	Capacity for University	1349	30609	2661
	Motivation for University	1323	30130	2618

LANGUAGE GROUP MEANS FOR VARIABLES EMPLOYED IN MULTIPLE

DISCRIMINANT ANALYSIS COMPUTATION BY YEAR OF SCHOOL ATTENDANCE

	1st Year			2nd Year			3rd Year			4th Year			5th Year		
	Eng.	Fr.	Oth.	Eng.	Fr.	Oth.	Eng.	Fr.	Oth.	Eng.	Fr.	Oth.	Eng.	Fr.	Oth.
1. Sex	1.49	1.53	1.50	1.49	1.53	1.49	1.48	1.50	1.46	1.47	1.50	1.45	1.43	1.41	1.39
2. Reliability Rating By Teacher	3.20	3.03	3.39	3.27	3.14	3.46	3.35	3.23	3.52	3.42	3.34	3.56	3.49	3.36	3.62
3. Cooperation Rating By Teacher	3.35	3.21	3.51	3.41	3.31	3.57	3.48	3.39	3.63	3.54	3.46	3.67	3.60	3.46	3.72
4. Industry Rating By Teacher	3.13	3.03	3.39	3.20	3.16	3.46	3.28	3.26	3.52	3.36	3.37	3.58	3.43	3.35	3.63
5. Energy Rating By Teacher	3.14	3.08	3.28	3.18	3.13	3.31	3.21	3.18	3.34	3.25	3.23	3.37	3.28	3.21	3.41
6. Chances of Completing Gd. 13	2.48	2.29	2.67	2.58	2.46	2.77	2.72	2.60	2.89	2.85	2.77	2.99	3.01	2.78	3.14
7. CAAT I Score	27.60	17.87	25.18	28.22	18.60	25.81	29.04	19.49	26.68	29.81	20.43	27.25	30.85	20.78	28.35
8. CAAT II Score	14.62	10.20	14.20	14.93	10.58	14.50	15.34	10.95	14.90	15.74	11.35	15.17	16.28	11.64	15.74
9. CAAT III Score	30.88	26.67	30.88	31.33	27.55	31.36	31.84	28.37	31.79	32.30	29.03	32.11	32.82	28.99	32.69
10. CEAT I Score	16.34	12.27	15.93	16.58	12.56	16.18	16.90	12.93	16.53	17.22	13.31	16.74	17.65	13.49	17.13
11. CEAT II Score	68.91	55.19	69.58	70.05	56.81	70.64	71.46	58.44	72.02	72.78	60.16	72.93	74.33	60.44	74.62
12. CEAT III Score	22.34	17.31	21.32	22.75	17.89	21.70	23.28	18.58	22.21	23.79	19.24	22.54	24.43	19.54	23.24
13. CMAT I Score	19.53	18.03	20.12	19.79	18.39	20.38	20.07	18.67	20.64	20.34	18.99	20.84	20.58	19.00	21.08
14. CMAT II Score	25.16	19.73	24.69	25.56	20.22	25.12	26.00	20.60	25.68	26.56	21.38	26.02	27.20	21.74	26.64
15. CMAT III Score	16.51	12.99	16.94	16.86	13.44	17.31	17.32	13.89	17.74	17.72	14.35	18.03	18.22	14.67	18.49
16. Size of Community	4.70	4.50	5.25	4.72	4.51	5.28	4.73	4.55	5.28	4.76	4.58	5.30	4.78	4.59	5.34
17. Year of Birth	4.79	4.65	4.48	4.90	4.83	4.57	5.01	4.88	4.68	5.09	5.09	4.74	5.20	5.13	4.86
18. Fathers' Occupational Group	4.45	4.38	3.52	4.47	4.41	3.49	4.51	4.55	3.43	4.54	4.39	3.40	4.66	4.41	3.43
19. Number of Children in Family	1.42	1.71	1.36	1.40	1.69	1.34	1.39	1.67	1.33	1.37	1.66	1.31	1.34	1.64	1.29
20. Fathers' Education	2.11	1.59	1.88	2.14	1.62	1.90	2.21	1.69	1.92	2.27	1.76	1.95	2.38	1.74	2.02
21. Mothers' Education	2.12	1.57	1.71	2.15	1.61	1.73	2.20	1.66	1.76	2.25	1.72	1.78	2.34	1.74	1.84
22. Parents' Career Suggestions	6.19	5.81	6.12	6.34	5.99	6.28	6.56	6.25	6.52	6.74	6.47	6.68	7.06	6.56	7.06
23. Teachers' Career Suggestions	5.06	5.49	5.24	5.16	5.61	5.32	5.30	5.80	5.47	5.42	5.95	5.57	5.60	5.91	5.80
24. Friends' Career Plans	5.57	5.56	5.68	5.66	5.64	5.76	5.80	5.74	5.91	5.92	5.90	6.01	6.12	5.87	6.19
25. Students' Career Plans	6.27	5.99	6.29	6.43	6.18	6.43	6.46	6.43	6.66	6.82	6.68	6.80	7.13	6.75	7.17

APPENDIX B

Tests

b) CEAT II - Mechanics of Expression, (120 items, time: 30 minutes). There were three sections to this test, dealing respectively with punctuation, capitalization, and grammatical usage. The completion of alternative choice items tested the students' knowledge of verb tenses, adjective degrees and the nominative and accusative cases of nouns and pronouns.

c) CEAT III - Effectiveness of Expressions, (37 items, time: 30 minutes). This test was composed of alternative-response items dealing with the selection of suitable passages, sentence completion and rearrangement.

3. The Canadian Mathematics Achievement Test. This was a test composed of three parts:

a) CMAT I - Arithmetic Computation, (26 items, time: 30 minutes). The items were based on the solution of addition, subtraction, and division problems.

b) CMAT II - Facts, Terms and Concepts, (40 items, time: 30 minutes). The items on this subtest dealt with arithmetical terms, facts, and concepts.

c) CMAT III - Measurement, (25 items, time: 30 minutes).

These items involved the addition, subtraction, division, and multiplication of units of measurement.

B Tests Administered in Grade 10

1. The Canadian Achievement Test in English, (110 items, time: 1 hour). There were four sections in this test, dealing

respectively with punctuation, capitalization and spelling, vocabulary, grammar and usage, and comprehension and appreciation.

2. The Canadian Achievement Test in French, (102 items, time: 1 hour). The four sections of this test were concerned with vocabulary, grammar, comprehension, and pronunciation.
3. The Canadian Achievement Test in Mathematics, (30 items, time: 1 hour). This test was composed of three sections dealing respectively with algebra, geometry, and mensuration.
4. The Canadian Test of General Information, (in two forms administered according to sex, 140 items, time: 1 hour). There were ten sections in this test, dealing respectively with famous people, general information, physical education and health, music and art appreciation, current events, history, science, government and politics, geography, and literature.

C Tests Administered in Grade 11

1. The Canadian Physics Test - Ontario Edition, (72 items, time: 1 hour). This test was composed of three twenty-minute sections dealing with density, specific gravity and heat, sound and light, and electricity and magnetism.
2. The Canadian Geometry Test - Ontario Edition, (40 items,

time: 1 hour). This test was not divided into subsections, and tested basic knowledge of geometric facts, and the application of those facts to the solution of numeric type problems..

D Test Administered in Grade 12

1. Scholastic Aptitude Test - Ontario Edition, (90 items, time: 2 hours). There were two sections to this test:

- a) Verbal

Subtest I - Vocabulary, (40 items).

Subtest II - Comprehension, (20 items).

- b) Mathematics

Subtest III - Arithmetic Reasoning, (30 items).

APPENDIX C

Questionnaires

Carnegie Study of Identification and
Utilization of Talent in High School and College

STUDENT QUESTIONNAIRE

DO NOT OPEN THIS FOLDER UNTIL YOU ARE TOLD TO DO SO


General Directions. This folder contains a number of questions which you are to answer. Please answer all questions frankly. Any information given will be used for research purposes only and will be held in strict confidence. If there are any questions that you would prefer not to answer, you may omit them.

YOU ARE TO INDICATE YOUR ANSWERS TO ALL QUESTIONS ON THE ANSWER CARD. After you have decided which of the suggested answers is the one you have to give to a question, blacken the space on the answer card in the oval in which its number appears. Use the special pencil provided by the examiner. Make a heavy, glossy black mark on the card by moving your pencil up and down two or three times so that it completely fills the oval space and covers the figure inside it. Just fill the oval and no more. If you wish to change an answer, erase your first mark completely and indicate your new choice. Give only one answer to each question.

Here is an example. You will see that each possible answer to a question has a code number following it:

Example

(1) In what type of area do you live?

(1) 

Code

City	1	Village	3
Town	2	Rural Area	4

In this question, four possible answers are given. Let us suppose that you live in a village. Its code number is 3, so you would make a heavy, black mark in the oval marked 3, as illustrated.

As you mark your answers to the questions, make sure that the oval you fill in on the card corresponds to the code number of the choice you have made. Do not make any stray marks on your answer card or let your pencil point rest on it while you are thinking about the questions.

DO NOT OPEN THIS FOLDER UNTIL YOU ARE TOLD TO DO SO

Department of Educational Research
Ontario College of Education
University of Toronto

1. Sex: Code Boy 1 Girl 2

2. Which course are you taking at school?

Code

General	1	Vocational—Technical ..	5
Vocational—Art	2	Vocational—Other	6
Vocational—Commercial	3	Special Courses	7
Vocational—Home Economics	4		

3. In which year were you born?

Code

1941 or before	1	1946	6
1942	2	1947	7
1943	3	1948	8
1944	4	1949 or after	9
1945	5		

4. In which month is your birthday?

Code

January	1	July	7
February	2	August	8
March	3	September	9
April	4	October	10
May	5	November	11
June	6	December	12

5. What is the chief language spoken in your home? (Select one only.)

Code

English	1	Italian	7
French	2	Dutch	8
Ukrainian	3	Asiatic (Chinese or Japanese)	9
German	4	Slovak	10
Polish	5	Hungarian	11
Jewish (Yiddish).....	6	Other	12

6. To which of these groups does the principal occupation of your father (or guardian) belong? (Select one only.)

Code

Office work (cashier, clerk, secretary, bookkeeper, etc.)	1
Professional (doctor, lawyer, minister, teacher, etc.)	2
Executive (manages large business, industry, firm, department, etc.)	3
Worker in skilled trade (plumber, electrician, barber, carpenter, etc.)	4
Factory worker, labourer, janitor, hired farm hand, etc.	5
Salesman (insurance, real estate, auto, store, etc.)	6
Owens, rents, or manages a small business (store, station, cafe, etc.)	7
Owens, rents, or manages a farm	8
Other occupation	9
Don't know	10

7. Which one of the following occupational groups do you intend to enter? (Select one only.)

Code

Office work (cashier, clerk, secretary, bookkeeper, etc.)	1
Professional (doctor, lawyer, minister, teacher, nurse, etc.)	2
Executive (manage a large business, industry, firm, department, etc.)	3
Worker in skilled trade (plumber, electrician, barber, hairdresser, carpenter, etc.)	4
Factory worker, labourer, janitor, hired farm hand, waitress, etc.	5
Salesman or saleswoman (insurance, real estate, auto, store, etc.)	6
Own, rent, or manage a small business (store, station, cafe, etc.)	7
Own, rent, or manage a farm	8
Housewife	9
Other occupation	10
No choice made	11

16. Which one of the following courses of action best describes what your teachers suggest you should do? (Select one only.)

Code

Complete secondary school, then enter university	1
Complete secondary school, then enter teachers' college	2
Complete secondary school, then enter school of nursing	3
Complete secondary school, then enter technical or trade training	4
Complete secondary school, then obtain a job or work at home	5
Leave school as soon as possible to enter trade training	6
Leave school as soon as possible to take a job or work at home	7
Other plans or undecided	8

17. Which one of the following courses of action best describes the plans of most of your school friends? (Select one only.)

Code

Complete secondary school, then enter university	1
Complete secondary school, then enter teachers' college	2
Complete secondary school, then enter school of nursing	3
Complete secondary school, then enter technical or trade training	4
Complete secondary school, then obtain a job or work at home	5
Leave school as soon as possible to enter trade training	6
Leave school as soon as possible to take a job or work at home	7
Other plans or undecided	8

18. Which one of the following courses of action best describes your own plans? (Select one only.)

Code

Complete secondary school, then enter university	1
Complete secondary school, then enter teachers' college	2
Complete secondary school, then enter school of nursing	3
Complete secondary school, then enter technical or trade training	4
Complete secondary school, then obtain a job or work at home	5
Leave school as soon as possible to enter trade training	6
Leave school as soon as possible to take a job or work at home	7
Other plans or undecided	8

19. Which is your favourite subject in school? (Select one only.)

Code

English Literature and Language	1	Home Economics	7
French	2	Technical subjects	8
History and Geography (Social Studies) ..	3	Art	9
Mathematics	4	Music	10
Science	5	Other	11
Commercial subjects	6		

20. Were your parents (or guardians) members of the Home and School Association or Catholic Parent-Teacher Unit last year?

Code

No Home and School Association or Catholic Parent-Teacher Unit in the school	0
Mother (or female guardian), but not father, was a member	1
Father (or male guardian), but not mother, was a member	2
Both parents (or guardians) were members	3
Neither parent (or guardian) was a member	4

21. Were your parents (or guardians) on the Executive of the Home and School Association or Catholic Parent-Teacher Unit last year?

Code

Mother (or female guardian), but not father, was on the Executive	1
Father (or male guardian), but not mother, was on the Executive	2
Both parents (or guardians) were on the Executive	3
Neither parent (or guardian) was on the Executive	4

CARNEGIE STUDY - FEBRUARY, 1963; GRADE 12

STUDENT QUESTIONNAIRE

1. SEX: BOY-1 ☐ 1 ☐ 2
GIRL-2 ☐ 1 ☐ 2

2. WHICH COURSE ARE YOU TAKING AT SCHOOL? (RELATE ONLY ONE OF THE SEVEN SPACES BELOW)

C	GENERAL	1	VOCATIONAL-TECHNICAL	5
D	VOCATIONAL-ART	2	VOCATIONAL-OTHER	6
E	VOCATIONAL-COMMERCIAL	3	SPECIAL COURSES	7
F	VOCATIONAL-HOME ECONOMICS	4		

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7

SCHOOL NUMBER

3. WHICH ONE OF THE FOLLOWING OCCUPATIONAL GROUPS DO YOU INTEND TO ENTER? (SELECT ONE ONLY)

C	OFFICE WORK (CASHIER, CLERK, SECRETARY, BOOKKEEPER, ETC.)	1
D	PROFESSIONAL (DOCTOR, LAWYER, ENGINEER, TEACHER, NURSE, ETC.)	2
E	EXECUTIVE (MANAGE A LARGE BUSINESS, BUY/SELL, FARM, DEPARTMENT, ETC.)	3
F	WORKER IN SKILLED TRADE (PLUMBER, ELECTRICIAN, EXPOSER, MECHANIC, CARPENTER, ETC.)	4
G	FACTORY WORKER, LABORER, JANITOR, WRECK FARM HAND, WAITRESS, ETC.	5
H	SALESMAN OR SALESWOMAN (FURNITURE, REAL ESTATE, AUTO, STORE, ETC.)	6
I	OWN, RENT, OR MANAGE A SMALL BUSINESS (STORE, GAS STATION, CAFE, ETC.)	7
J	OWN, RENT, OR MANAGE A FARM	8
K	HOUSEWIFE	9
L	OTHER OCCUPATION	10
M	NO CHOICE MADE	11

STUDENT NUMBER

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11

4. HOW DEFINITE IS YOUR PRESENT CHOICE OF AN OCCUPATION?

C	COMPLETELY DECIDED	1
D	FAIRLY DEFINITE	2
E	FAIRLY INDEFINITE	3
F	COMPLETELY UNDECIDED	4

☐ 1 ☐ 2 ☐ 3 ☐ 4

5. OF THE FOLLOWING COURSES OF ACTION IN REGARD TO YOUR FUTURE EDUCATIONAL AND WORK PLANS, WHICH BEST DESCRIBES WHAT YOUR PARENTS OR GUARDIAN(S) SUGGEST YOU SHOULD DO? (SELECT ONE ONLY)

C	ENTER UNIVERSITY	1
D	ENTER TEACHERS' COLLEGE	2
E	ENTER SCHOOL OF NURSING	3
F	ENTER TECHNICAL OR TRADE TRAINING	4
G	OBTAIN A JOB	5
H	WORK AT HOME	6
I	OTHER PLANS	7
J	UNDECIDED	8

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 (SELECT ONE ONLY)

6. WHICH ONE OF THE ABOVE COURSES OF ACTION BEST DESCRIBES WHAT YOUR TEACHERS SUGGEST YOU SHOULD DO?

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 (SELECT ONE ONLY)

7. WHICH ONE OF THE ABOVE COURSES OF ACTION BEST DESCRIBES THE PLANS OF MOST OF YOUR SCHOOL FRIENDS?

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 (SELECT ONE ONLY)

8. WHICH ONE OF THE ABOVE COURSES OF ACTION BEST DESCRIBES YOUR OWN PLANS?

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 (SELECT ONE ONLY)

9. WHICH IS YOUR FAVORITE SUBJECT IN SCHOOL?

C	ENGLISH LITERATURE AND LANGUAGE	1	HOME ECONOMICS	7
D	FRENCH	2	TECHNICAL SUBJECTS	8
E	HISTORY AND GEOGRAPHY (SOCIAL STUDIES)	3	ART	9
F	MATHEMATICS	4	MUSIC	10
G	SCIENCE	5	OTHER	11
H	COMMERCIAL SUBJECTS	6		

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11

NAME OF STUDENT

CARNEGIE STUDY: FEBRUARY, 1960: GRADE 9

STAFF QUESTIONNAIRE FORM

FRONT

JAN 25 1964 N.S.

STUDENT NUMBER	TEMS	UNITS
C00	C00	C00
C01	C10	C10
C02	C20	C20
C03	C30	C30
C04	C40	C40
C05	C50	C50
C06	C60	C60
C07	C70	C70
C08	C80	C80
C09	C90	C90

1. ON EACH OF THE ITEMS (i) TO (iv) RATE THE STUDENT ON THE FOLLOWING SCALE: a—MUCH ABOVE AVERAGE, b—ABOVE AVERAGE, c—AVERAGE, d—BELOW AVERAGE, e—MUCH BELOW AVERAGE.

(i) RELIABILITY AS INDICATED BY PERFORMANCE OF CURRICULAR AND EXTRACURRICULAR DUTIES	C00	C00	C00	C00	C00
(ii) CO-OPERATION WITH TEACHERS AND STUDENTS	C00	C00	C00	C00	C00
(iii) INDUSTRY IN SCHOOL WORK	C00	C00	C00	C00	C00
(iv) PHYSICAL STAMINA AND ENERGY	C00	C00	C00	C00	C00
(v) STUDENT'S CHANCES OF COMPLETING GRADE 13 SUCCESSFULLY (ON BASIS OF ABOVE AND OTHER RELEVANT FACTORS)	C00	C00	C00	C00	C00

2. IS THE STUDENT REPEATING A GRADE AT PRESENT? YES NO

4. IN WHAT YEAR DID THE STUDENT ENTER GRADE 12? C00 C01 C02 C03 C04 C05 C06 C07 C08 C09

5. DOES THIS STUDENT HAVE ANY UNCORRECTED DEFECT IN VISION? YES NO

6. DOES THIS STUDENT HAVE ANY UNCORRECTED DEFECT IN HEARING? YES NO

7. DOES THIS STUDENT HAVE ANY OTHER UNCORRECTED PHYSICAL DISABILITY AFFECTING SCHOOL PROGRESS? YES NO

STUDENT'S HEIGHT (in inches) TEMS	UNITS
C00	C00
C01	C10
C02	C20
C03	C30
C04	C40
C05	C50
C06	C60
C07	C70
C08	C80
C09	C90

STUDENT'S WEIGHT (in pounds) TEMS	UNITS
C00	C00
C01	C10
C02	C20
C03	C30
C04	C40
C05	C50
C06	C60
C07	C70
C08	C80
C09	C90

CARNEGIE STUDY: MARCH, 1963

STAFF QUESTIONNAIRE

1. ON EACH OF THE ITEMS (i) TO (iv) RATE THIS STUDENT ON THE FOLLOWING SCALE: a—MUCH ABOVE AVERAGE, b—ABOVE AVERAGE, c—AVERAGE, d—BELOW AVERAGE, e—MUCH BELOW AVERAGE.

(i) RELIABILITY AS INDICATED BY PERFORMANCE OF CURRICULAR AND EXTRACURRICULAR DUTIES	C00	C00	C00	C00	C00
(ii) CO-OPERATION WITH TEACHERS AND STUDENTS	C00	C00	C00	C00	C00
(iii) INDUSTRY IN SCHOOL WORK	C00	C00	C00	C00	C00
(iv) PHYSICAL STAMINA AND ENERGY	C00	C00	C00	C00	C00

2. IS THIS STUDENT ATTEMPTING TO OBTAIN A COMPLETE FOUR-OPTION ONTARIO SECONDARY SCHOOL GRADUATION DIPLOMA AT THE END OF THIS YEAR? YES NO Not Applicable

FOR NOS. 3 TO 6, USE THE RATING SCALE PROVIDED WITH NO. 1.

3. RATE THIS STUDENT'S CAPACITY TO DO GRADE 13 WORK SUCCESSFULLY. C00 C01 C02 C03 C04

4. RATE THE STRENGTH OF THIS STUDENT'S MOTIVATION TO DO GRADE 13 WORK, ASSUMING HE HAS THE OPPORTUNITY C00 C01 C02 C03 C04

5. RATE THIS STUDENT'S CAPACITY TO DO UNIVERSITY WORK SUCCESSFULLY, ASSUMING HE HAS THE OPPORTUNITY. C00 C01 C02 C03 C04

6. RATE THE STRENGTH OF THIS STUDENT'S MOTIVATION TO ENTER UNIVERSITY. C00 C01 C02 C03 C04

STUDENT'S HEIGHT (in inches) TEMS	UNITS
C00	C00
C01	C10
C02	C20
C03	C30
C04	C40
C05	C50
C06	C60
C07	C70
C08	C80
C09	C90

STUDENT'S WEIGHT (in pounds) TEMS	UNITS
C00	C00
C01	C10
C02	C20
C03	C30
C04	C40
C05	C50
C06	C60
C07	C70
C08	C80
C09	C90

APPENDIX D

Carnegie Study Retention Tape

CARNEGIE STUDY RETENTION TAPE

TAPE POSITION ON RETENTION TAPE	CONTENTS	TAPE POSITION ON MASTER TAPE
1-6	Original Carnegie Number	1-6
7	Sex - Boy 1; Girl 2	132
8-9	First Year - Grade	1401-2
10 *2	" " - Course	1403 *2
11	" " - Withdrawal Month	1404
12	" " - Withdrawal Code	1405
13-14	Second Year - Grade	1406-7
15 *2	" " - Course	1408 *2
16	" " - Withdrawal Month	1409
17	" " - Withdrawal Code	1410
18-19	Third Year - Grade	1411-2
20 *2	" " - Course	1413 *2
21	" " - Withdrawal Month	1414
22	" " - Withdrawal Code	1415
23-24	Fourth Year - Grade	1416-7
25 *2	" " - Course	1418 *2
26	" " - Withdrawal Month	1419
27	" " - Withdrawal Code	1420
28-29	Fifth Year - Grade	1421-2
30 *2	" " - Course	1423 *2
31	" " - Withdrawal Month	1424
32	" " - Withdrawal Code	1425
33-34	Sixth Year Grade (Grade if Known or "00" to show "at school".)	1426-7

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35	Number of Schools Attended	111
	First Year Staff Questionnaire	
36 *1	Rating on Reliability	133
37 *1	Rating on Cooperation	134
38 *1	Rating on Industry	135
39 *1	Rating on Physical Stamina and Energy	136
40 *1	Rating on Chances of Completing	
	Grade 13	137
41	Grade Repetition (6 - Yes; 5 - No)	138
42	Student Missing School Often Enough to Affect School Work Adversely (0 - Yes; X - No)	139
43 *3	Year of Entering School	140
	Grade 9 Tests	
44-45	CAAT I Score	149-150
46-47	CAAT II Score	151-152
48-49	CAAT III Score	153-154
50-51	CEAT I Score	155-156
52-54	CEAT II Score	157-159
55-56	CEAT III Score	160-161
57-58	CMAT I Score	162-163
59-60	CMAT II Score	164-165
61-62	CMAT III Score	166-167
63	School Factor	168
	First Year Student Questionnaire	
64 *4	Year of Birth	171
65	Chief Language Spoken in Home	173
66 *5	Father's Occupational Group	174
67 *6	Intended Occupation	175
68	Mother Employed Outside Home (1 - Yes; 2 - No)	176
69	Status of Parents (Codes 9, 8, 7, 6)	177

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70	*7	Number of Children in Family	180
71	*8	Father's Education	181
72	*8	Mother's Education	182
73		Parents' Suggestions Regarding Educational and Work Plans	183
74		Teachers' Suggestions Regarding Educational and Work Plans	184
75		School Friends' Plans for Education or Work	185
76		Student's Own Plans for Education or Work	186
School Marks - First Year			
77-78		Mathematics	359-360
79-80		English	355-6
81-82		Average	383-4
School Marks - Second Year			
83-84		Mathematics	
		If Grade 9	631-632
		If Grade 10	629-630
		If Grade 11	
85-86		English	
		If Grade 9	627-8
		If Grade 10	623-4
		If Grade 11	
87-88		Average	
		If Grade 9	655-6
		If Grade 10	661-2
		If Grade 11	
School Marks - Third Year			
89-90		Mathematics	
		If Grade 9	734-5
		If Grade 10	736-7
		If Grade 11	734-5
		If Grade 12	

-4-

91-92	English	
	If Grade 9	730-1
	If Grade 10	730-1
	If Grade 11	730-1
93-94	If Grade 12	
	Average	
	If Grade 9	758-9
	If Grade 10	768-9
	If Grade 11	744-5
	If Grade 12	
School Marks - Fourth Year		
95-96	Mathematics	
	If Grade 9	1014-5
	If Grade 10	1016-7
	If Grade 11	1014-5
	If Grade 12	1012-3
	English	
	If Grade 9	1010-1
	If Grade 10	1010-1
97-98	If Grade 11	1010-1
	If Grade 12	1008-9
99-100	Average	
	If Grade 9	1038-9
	If Grade 10	1048-9
	If Grade 11	1024-5
	If Grade 12	1022-3
School Marks - Fifth Year		
101-102	Mathematics	
	If Grade 9	
	If Grade 10	
	If Grade 11	1096-7
	If Grade 12	1096-7

-5-

103-104	English	
	If Grade 9	
	If Grade 10	
	If Grade 11	1092-3
	If Grade 12	1092-3
105-106	Average	
	If Grade 9	
	If Grade 10	
	If Grade 11	1106-7
	If Grade 12	1106-7
	Grade 10 Tests	
107-109	CTGI Score	449-451
110-112	CATE Score	452-454
113-114	CATM Score	455-456
115-117	CATF Score	457-459
	Grade 11 Tests	
118-119	CPTO Score	720-721
120-121	CGTO Score	724-725
	Fourth Year Student Questionnaire	
122 *9	How Definite is Present Choice of Occupation	805
123	Recommendation of Future Educational and Work Plans by Parents or Guardians	806
124	Which of the Above Courses Does the Teacher Suggest	807
125	Which of the Above Courses is Recommended by School Friends	808
126	Which of the Above Courses Describes Your Own Plans	809

Fourth Year Staff Questionnaire

127	*1	Rating on Reliability	811
128	*1	Rating on Cooperation	812
129	*1	Rating on Industry in School Work	813
130	*1	Rating on Physical Stamina	814
131	*1	Rating on Student's Capacity to do Grade 13 Work Successfully	816
132	*1	Motivation to do Grade 13 Work	817
133	*1	Capacity for University Work	818
134	*1	Strength of Student's Motivation to Enter University	819

Grade 12 Tests

135-136	SATO Verbal I Score	836-7
137-138	SATO Verbal II Score	838-9
139-140	SATO Total Verbal Score	840-1
141-142	SATO Mathematics Score	842-3
143-144	English TESU	852-3
145-146	French - ATF or ECF	854-5
147	Which French Test (1 - ATF; 2 - ECF)	828

Grade 13 Student Questionnaire

148	Will you be Qualified for University	1082
149	Plans After Grade 13	1083

Completed by those Planning to go
to University

150	Family can Finance	1084
151	Chance for a Scholarship	1085
152	Expect to Work While at University	1086

Completed by those not Planning to
go to University

153	Planning University Later	1087
154	University if Finances O.K.	1088

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Completed by All

155	Family Income for University	1089
156	Number of Children in Family	
	(1 - Three and Under;	
	2 - Four and Over.)	180

APPENDIX*1 Teachers' Rating Codes

- 1 - Much Below Average
- 2 - Below Average
- 3 - Average
- 4 - Above Average
- 5 - Much Above Average

*2 Codes for Courses Used in Retention Study

- 1 - Five Year General Course
- 2 - Four Year Vocational Course
 - Starting in Grade 9 or 10
- 3 - Special Courses Starting After Grade 11
or After Grade 12
- 4 - Special 1 and 2 Year Courses

*3 Codes for Year of Entering School

- 1 - 1947 or earlier
- 2 - 1948
- 3 - 1949
- 4 - 1950
- 5 - 1951
- 6 - 1952
- 7 - 1953 or later

*4 Codes for Year of Birth

- 1 - 1941 or before
- 2 - 1942
- 3 - 1943
- 4 - 1944
- 5 - 1945
- 6 - 1946
- 7 - 1947
- 8 - 1948
- 9 - 1949 or after

Appendix, Page 2

*5 Codes for Father's Occupational Group

- 1 - Factory Work
- 2 - Skilled Trade
- 3 - Office Work
- 4 - Small Business
- 5 - Salesman
- 6 - Farm
- 7 - Executive
- 8 - Professional
- 9 - Other
- 0 - Don't Know

*6 Codes for Intended Occupation

- 1 - Factory Work
- 2 - Skilled Trade
- 3 - Office Work
- 4 - Small Business
- 5 - Salesman
- 6 - Farm
- 7 - Executive
- 8 - Professional
- 9 - Other
- 0 - Don't Know
- X - Housewife

*7 Codes for Number of Children in Family

- 1 - One
- 2 - Two
- 3 - Three
- 4 - Four
- 5 - Five or More

Appendix, Page 3

*8 Codes for Father's and Mother's Education

- 1 - No Secondary School
- 2 - Part Secondary School
- 3 - Complete Secondary School
- 4 - Part University
- 5 - University Degree

*9 Codes for How Definite is Present Choice of Occupation

- 1 - Completely Undecided
- 2 - Fairly Indefinite
- 3 - Fairly Definite
- 4 - Completely Decided

B I B L I O G R A P H Y

Language and Learning

- Anderson, T. "New Focus on the Bilingual Child," Modern Language Journal, XLIX (March 1965), 155-60.
- Chen, M.K. "Intelligence and Bilingualism as Independent Variates in a Study of Junior High School Students of Chinese Descent," Journal of Experimental Education, XXXIII (Spring, 1965), 243-50.
- Cohen, D.H. "Language and Experience: the setting," Childhood Education, XLII (November, 1965), 139-142.
- Galbraith, C.K. "Spanish-Speaking Children Communicate," Childhood Education, XLII (October, 1965), 70-74.
- Gardner, A.B. "Teaching the Bilingual Child: research, development, and policy," Modern Language Journal, XLIX (March, 1965), 165-75.
- Gardner, R.C. and Lambert, W.E. "Language Aptitude, I.Q. and Second-Language Achievement," Journal of Educational Psychology, LVI (August, 1965), 191-9.
- Keleher, A.V. "Language and Learning," Childhood Education, XLII (November, 1965), 131.
- Kopel, David. "Reading Readiness: Its Determination and Use," Teachers' College Journal, XLII (1941), 64-70.
- Lefevre, C.A. "Language and Self: fulfillment or trained?" Elementary English, XLIII (February-March, 1966), 124-8 and 230-4+.
- Metz, F.E. "Poverty, Early Language Deprivation and Learning Ability," Elementary English, XLIII (February, 1966), 129-33.
- Valette, R.M. "Some Reflections on Second-Language Learning in Young Children," Language Learning, XIV. No. 3 and 4 (1964), 91-8.

School Retention

- Bledsoe, J.C. "An Investigation of Six Correlates of Student Withdrawal from High School," Journal of Educational Research, LIII (September, 1959), 3-6.
- Cook, E.S., Jr. "An Analysis of Factors Related to Withdrawal from High School Prior to Graduation," Journal of Educational Research, L (1956), 191-196.
- Coster, J.K. "Some Characteristics of High School Pupils from Three Income Groups," Journal of Educational Psychology, L (April, 1959) 55-65.
- Deutsch, M. "Early Social Environment and School Adaptation," Teachers College Record, LXVI (May, 1965), 699-706.
- Mannino, F.V. "Family Factors Related to School Persistence," Journal of Educational Sociology, XXXV (January, 1962), 193-202.
- Miller, S.M., Saleem, B.L. "Residential Characteristics of School Dropouts". Syracuse, New York: Youth Development Center, Syracuse University, 1963. (Mimeographed).
- New Brunswick Department of Youth and Welfare. New Brunswick School Dropouts in the Academic Year 1963-1964. Research Report Prepared by Mary A. Drummie. Fredericton: New Brunswick Department of Youth and Welfare, 1965.
- Segel, D. Longitudinal Study of the Relationship Between Certain Predictive Factors and Pupil Dropouts. Washington, D.C.: United States Department of Higher Education and Welfare, Office of Education, 1956.
- _____. Retention in High Schools in Large Cities. Washington, D.C.: United States Department of Higher Education and Welfare, Office of Education, 1960.
- Strom, R.D. "The Dropout Problem in Relation to Family Affect and Effect," School and Society, XCII (April 18, 1964), 191-2.

Statistics

- Cooley, W.W., Lohnes, P.R. Multivariate Procedures for the Behavioural Sciences. New York: John Wiley and Sons, Inc., 1962.

Garrett, H.E. Statistics in Psychology and Education. New York: Longmans, Green and Co., 1958.

Guilford, J.P. Fundamental Statistics in Psychology and Education. New York: McGraw-Hill Book Company, 1956.

Kelly, F.J., Veldman, D.J., McGuire, Carson. "Multiple Discriminant Prediction of Delinquency and School Dropouts," Educational and Psychological Measurement, XXIV (1964), 535-544.

Rao, C.R. Advanced Statistical Methods in Biometric Research. New York: John Wiley and Sons, Inc., 1952.

Rulon, P.J. "Distinctions Between Discriminant and Regression Analyses and a Geometric Interpretation of the Discriminant Function," Harvard Educational Review, XXI (Spring, 1951), 80-95.

Tiedman, D.V. "The Utility of the Discriminant Function in Psychological and Guidance Investigations," Harvard Educational Review, XXI (Spring, 1951), 71-80.

_____. Bryan, J.G. "Prediction of College Field of Concentration," Harvard Educational Review, XXIV (Spring, 1954), 122-139.

